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Solar-Geophysical Data comprehensive reports

Data for September 1996

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SOLAR-GEOPHYSICAL DATA

Number 631

(Issued in Two Parts)

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CONTENTS

PART I (PROMPT REPORTS)

	Page
DETAILED INDEX FOR 1996-1997	2
DATA FOR FEBRUARY 1997	3- 31
DATA FOR JANUARY 1997	33-110

PART II (COMPREHENSIVE REPORTS)

	Page
DETAILED INDEX FOR 1996-1997	2
DATA FOR SEPTEMBER 1996	3- 20
MISCELLANEOUS	21- 62

NEW DATA

San Fernando Observatory Calcium II K-line Facular Data Jan 92-Dec 96

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	JUL 96	AUG	SEP	OCT	NOV	DEC	JAN 97	FEB
A. SOLAR AND INTERPLANETARY									
A.1	Sunspot Drawings	625A 41	626A 42	627A 40	628A 39	629A 41	630A 39	631A 39	
A.2aa	International Provisional Sunspot Numbers	624A 25	625A 25	626A 23	627A 25	628A 23	629A 25	630A 25	631A 23
A.2c	American Sunspot Numbers	624A 25	625A 25	626A 23	627A 25	628A 23	629A 25	630A 25	631A 23
A.3a	Mt. Wilson Magnetograms	625A 41	626A 42	627A 40	628A 39	629A 41	630A 39	631A 39	
A.3b	Sunspot Mag Class and Regions	625A 88	626A 92	627A 85	628A 86	629A 86	630A 86	631A 86	
A.3c	Kitt Peak Magnetograms	625A 41	626A 42	627A 40	628A 39	629A 41	630A 39	631A 39	
A.3d	Mean Solar Magnetic Field (Stanford)	624A 33	625A 31	626A 27	627A 29	628A 29	629A 31	630A 29	631A 29
A.3e	Stanford Magnetograms	625A 41	626A 42	627A 40	628A 39	629A 41	630A 39	631A 39	
A.4	H-alpha Filtergrams	625A 41	626A 42	627A 40	628A 39	629A 41	630A 39	631A 39	
A.5d	Photometric Ca II Faculae (San Fernando)	May 88-Dec 91 in 630B 37; Jan 92-Dec 96 in 631B 22							
A.6c	Stanford Solar Mag Field Synoptic Maps	625A 36	626A 32	627A 34	628A 34	629A 36	630A 34	631A 34	
A.6d	Kitt Peak Solar Mag Field Synoptic Maps	625A 40	626A 40	627A 39	628A 38	629A 40	630A 38	631A 38	
A.6f	Active Prominences and Filaments	629B 22	630B 21	631B 16					
A.6g	Sac Peak Coronal Line Synoptic Maps	625A 38	626A 36	627A 36	628A 36	629A 38	630A 36	631A 36	
A.6h	Photometric White Light (San Fernando)	Aug 95-Jun 96 in 624B 24; Jul-Dec 96 630B 32							
A.7h	Coronal Line Emission (Sac Peak)	625A 41	626A 42	627A 40	628A 39	629A 41	630A 39	631A 39	
A.7j	Coronal Holes (Sonora, Mexico)								
A.8aa	2800 MHz- Solar Flux (Penticton)	624A 27	625A 25	626A 23	627A 25	628A 23	629A 25	630A 25	631A 23
A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	624A 27	625A 25	626A 23	627A 25	628A 23	629A 25	630A 25	631A 23
A.8g	Adjusted Daily Solar Fluxes (Learmonth)	624A 27	625A 25	626A 23	627A 25	628A 23	629A 25	630A 25	631A 23
A.10g	Nancay Radioheliograph - 1648327 MHz			627A 91	628A 92	629A100	630A 96	631A 93	
A.11g	Solar X-ray GOES (graphs/event table)	629B 14	630B 13	631B 9					
A.11k	Solar UV NOAA-9	May 86-Dec 88 in 566B 84							
A.11l	Solar UV NIMBUS7	Nov 78-Oct 84 in 542B 82							
A.11m	Solar UV SOLSTICE (UARS)	Oct 91-Sep 94 in 607B 46							
A.11n	Solar YOHKOH Soft X-ray Images	625A 72	626A 73	627A 70	628A 70	629A 71	630A 70	631A 70	
A.11o	Solar UV SUSIM (UARS)	Oct 91-Jan 97 in 629B 30							
A.12g	Solar Particles (GOES-7)	624A 4	625A 4	626A 4	627A 4	628A 4	629A 4	630A 4	631A 4
A.12h	Interplanetary Particles (SAMPEX)	Jan-Dec 94 in 618B 30; Jan-Jun 95 in 620B 36							
A.13e	Solar Plasma (IMP-8)	629B 26	630B 26	631B 18					
A.16c	ERBS, NOAA-9 & -10 Solar Irradiance	1989 in 551B 78; ERBS Oct 84-Dec 95 in 620B 50							
A.16d	UARS Solar Irradiance	1991-1993 in 608B 40							
A.17c	Inferred Interplanetary Mag Field	1984-1988 data in 542A168; 1989-Jan 94 in 611A118							
A.17	IMP-8 Interplanetary Mag Field	629B 27	630B 27	631B 19					
C. SOLAR FLARE-ASSOCIATED EVENTS									
C.1a	H-alpha Flares	624A 28	625A 28	626A 26	627A 28	628A 26	629A 28	630A 28	631A 26
C.1ba	H-alpha Flare Groups	629B 4	630B 4	631B 4					
C.1d	Flare Patrol Observations	629B 8	630B 7	631B 6					
C.3	Radio Bursts Fixed Frequency	629B 10	630B 9	631B 8					
C.3	Radio Bursts Fixed Frequency Selected	624A 31	625A 30			628A 28	629A 30		631A 28
C.4	Radio Bursts Spectral	625A 91	626A 98	627A 87	628A 88	629A 92	630A 91	631A 89	
C.6	Sudden Ionospheric Disturbances	625A 89	626A 97	627A 86	628A 87	629A 90	630A 89	631A 88	
D. GEOMAGNETIC EVENTS									
D.1a	Geomagnetic Indices	625A103	626A111	627A100	628A101	629A109	630A105	631A102	
D.1ba	27-day Chart of Kp Indices	625A105	626A113	627A102	628A103	629A111	630A107	631A104	
D.1cb	Monthly Mean aa Indices	625A106	626A114	627A103	628A104	629A112	630A108	631A105	
D.1d	Principal Magnetic Storms	625A110	626A117	627A107	628A108	629A116	630A115	631A109	
D.1f	Sudden Commencements/Flare Effects	625A111	626A118	627A109	628A109	629A117	630A116	631A110	
D.1g	Equatorial Indices Dst	625A109	627A112	627A106	628A107	629A115	630A114	631A108	
D.1i	Polar Cap (PC) Index	625A108	626A116	627A105	628A106	629A114	630A112	631A107	
F. COSMIC RAYS									
F.1b	Cosmic Ray Neutron Cts (Climax)	625A 98	626A106	627A 92	628A 93	629A101	630A 97	631A 94	
F.1h	Cosmic Ray Neutron Cts (Thule)	625A 98	626A106	627A 92	628A 93	629A101	630A 97	631A 94	
F.1i	Cosmic Ray Neutron Cts (Kiel)				628A 93	629A101	630A 97	631A 94	
F.1j	Cosmic Ray Neutron Cts (Tokyo)								
F.1n	Cosmic Ray Neutron Cts (Beijing)	625A 98	626A106	627A 92	628A 93	629A101	630A 97	631A 94	
F.1b	Cosmic Ray Neutron Cts (Haleakala)	625A 98	626A106	627A 92	628A 93	629A101	630A 97	631A 94	
F.1o	Cosmic Ray Neutron Cts (Moscow)	625A 98	626A106	627A 92	628A 93	629A101	630A 97	631A 94	
F.1p	Cosmic Ray Neutron Cts (Calgary)	625A 98	626A106	627A 92	628A 93	629A101	630A 97	631A 94	
H. MISCELLANEOUS									
H.60	IUWDS Alert Periods	624A 20	625A 20	626A 19	627A 20	628A 19	629A 20	630A 20	631A 18

The entry "625A 41" under Jul 96, for example, means that the sunspot drawings for Jul 1996 appear in SOLAR-GEOPHYSICAL DATA No. 625, Part I, and that they begin on page 41. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

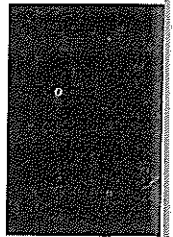
CONTENTS

Comprehensive Reports

Number 631 Part II

DATA FOR SEPTEMBER 1996

	Page
SOLAR FLARES	
H-alpha Solar Flare Groups	4- 5
Intervals of No Flare Patrol Observation	6
Number of Solar Flares January 1965-present	7
SOLAR RADIO BURSTS AT FIXED FREQUENCIES	8
SOLAR X-RAY RADIATION FROM GOES SATELLITE Graphs	9-13
Preliminary Event List	14
Preliminary Daily Average Background	15
ACTIVE PROMINENCES AND FILAMENTS	16-17
SOLAR IRRADIANCE (Unavailable at time of publication.)	
IMP-8 SOLAR WIND Plot	18
IMP-8 INTERPLANETARY MAGNETIC FIELD Plot	19-20



SEPTEMBER 1996

Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Area Measurement		Remarks	
							USAF Region					Mo	Day		(Min)
		14	2138	2145	No	Flare	Patrol								
		14	2155	2242	No	Flare	Patrol								
		17	1012	1034	No	Flare	Patrol								
		19	1024	1042	No	Flare	Patrol								
		19	1052	1133	No	Flare	Patrol								
		19	1250	1302	No	Flare	Patrol								
		20	1013	1018	No	Flare	Patrol								
		20	1041	1046	No	Flare	Patrol								
		22	0055	0542	No	Flare	Patrol								
		22	0956	1006	No	Flare	Patrol								
		22	1027	1034	No	Flare	Patrol								
		24	2148	2208	No	Flare	Patrol								
		25	1212	1224	No	Flare	Patrol								
		25	2211	2228	No	Flare	Patrol								
		26	1003	1010	No	Flare	Patrol								
		26	1016	1026	No	Flare	Patrol								
		26	2042	2050	No	Flare	Patrol								
		26	2120	2137	No	Flare	Patrol								
		26	2221	2307	No	Flare	Patrol								
		27	0507	0514	No	Flare	Patrol								
		27	0524	0528	No	Flare	Patrol								
		27	0553	0558	No	Flare	Patrol								

0003 KANZ 27 0825 0829 0833 S05 E02 09 27.5 8 SF 2 C G

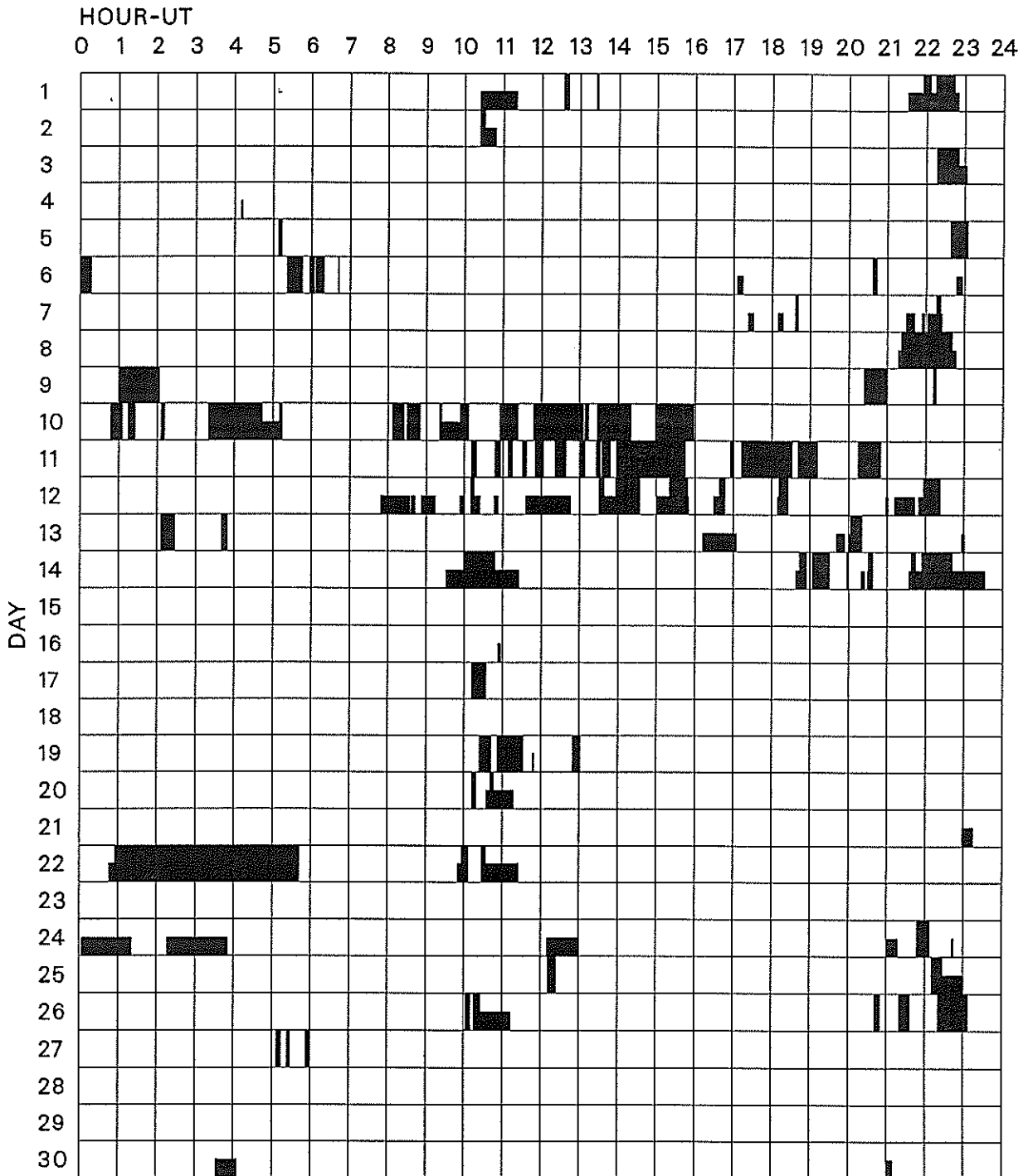
"Remarks"

- | | |
|---|---|
| <p>A = Eruptive prominence whose base is less than 90 degrees from central meridian.
 B = Probably the end of a more important flare.
 C = Invisible 10 minutes before.
 D = Brilliant point.
 E = Two or more brilliant points.
 F = Several eruptive centers.
 G = No visible spots in the neighborhood.
 H = Flare accompanied by high-speed dark filament.
 I = Active region very extended.
 J = Distinct variations of plage intensity before or after the flare.
 K = Several intensity maxima.
 L = Existing filaments show signs of sudden activity.
 M = White-light flare.
 N = Continuous spectrum shows effects of polarization.</p> | <p>O = Observations have been made in the H and K lines of Ca II.
 P = Flare shows Helium D3 in emission.
 Q = Flare shows Balmer continuum in emission.
 R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
 S = Brightness follows disappearance of filament in same position.
 T = Region active all day.
 U = Two bright branches, parallel or converging.
 V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.
 W = Great increase in area after time of maximum intensity.
 X = Unusually wide H-alpha line.
 Y = System of loop-type prominences.
 Z = Major sunspot umbra covered by flare.</p> |
|---|---|

Observation Type: C=Cinematographic, E=Electronic, P=Photographic, V=Visual

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

SEPTEMBER 1996



Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual nor cinematographic); portions of a panel with only the bottom half shaded mark times of only visual patrol.

Holloman
Hurbanovo
Kanzelhoehe

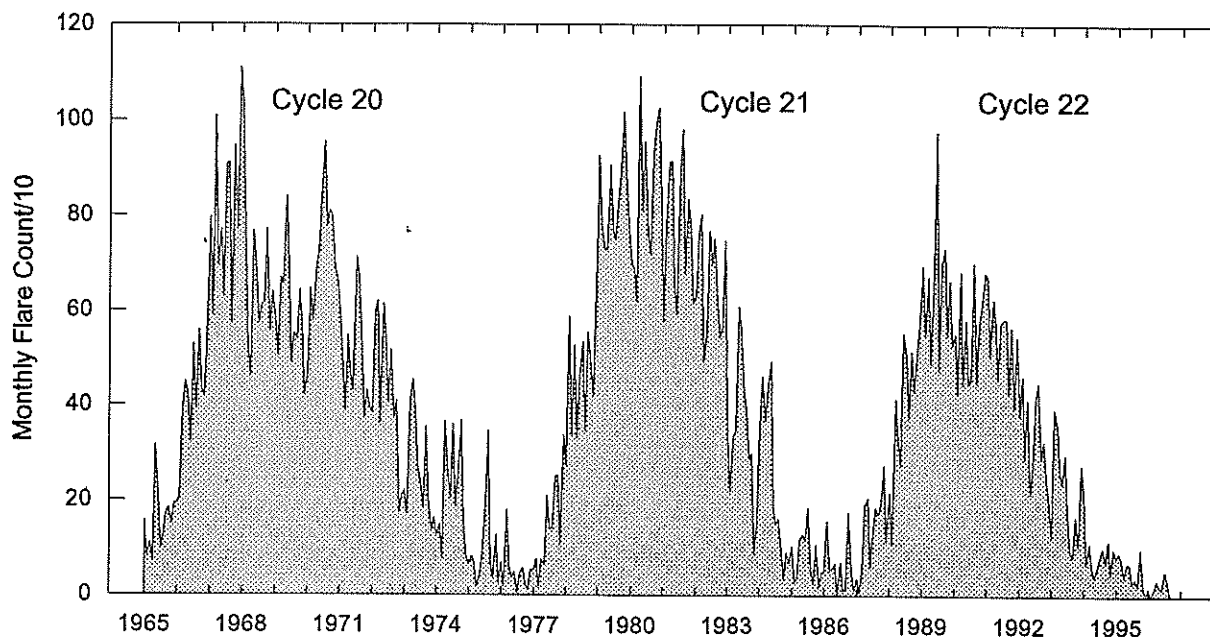
Kharkov
Learmonth
Meudon

Mitaka
Palehua

Ramey
San Vito

Monthly Counts of Grouped Solar Flares

Jan 1965 - Sep 1996



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1965	158	85	110	74	315	231	99	127	173	184	150	193	1899
1966	194	205	390	449	429	323	528	391	558	432	417	543	4859
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	513	429	518	587	4816
1989	695	544	672	488	691	977	474	699	733	547	665	526	7711
1990	550	424	684	442	580	445	454	703	449	574	623	682	6610
1991	672	503	625	570	458	574	582	581	425	565	396	544	6495
1992	380	462	287	412	214	271	413	447	287	325	248	206	3952
1993	123	392	357	262	237	296	154	92	82	167	104	275	2541
1994	217	67	111	60	40	56	81	101	72	117	45	99	1066
1995	82	95	77	42	69	66	29	37	23	99	14	6	639
1996	14	3	15	34	21	16	54	31	3				191

The term 'grouped' means observations of the same event by different sites were lumped together and counted as one.

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

SEPTEMBER 1996

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m ² Hz)	Mean		
01	204 IZMI	5 S	0907.0	0907.1	0.2	55.0	3.0		
	33 UPIC	45 C	1159.4	1200.8	3.1				
	33 UPIC	42 SER	1402.2	1506.2	65.9				
02	204 IZMI	42 SER	0636.0	0638.0	16.0	60.0			
	204 IZMI	7 C	0723.0	0724.3	2.0	11.0			
03	33 UPIC	2 S/F	1220.0	1220.4	0.5				
07	3000 IZMI	7 C	0658.5	0658.6	1.0	43.0	20.0		
11	2840 PEKG	4 S/F	0039.0	0039.5	2.0	64.3			
	2840 PEKG	3 S	0043.0	0044.7	8.0	17.1			
15	33 UPIC	45 C	1459.3	1459.6	1.5				
16	33 UPIC	1 S	0754.5	0754.7	0.5				
	33 UPIC	1 S	1033.0	1033.5	0.6				
17	3000 IZMI	7 C	1153.2	1153.5	1.0	26.0	12.0		
18	33 UPIC	2 S/F	1108.8	1109.5	1.5				
19	33 UPIC	45 C	1440.5	1442.0	3.2				
20	33 UPIC	1 S	0742.1	0742.3	0.5				
	33 UPIC	1 S	0810.7	0810.9	0.4				
	33 UPIC	46 C	1207.5	1208.7	2.2				
23	204 IZMI	42 SER	1007.5	1008.7	1.4	55.0			
	33 UPIC	1 S	1220.0	1220.3	0.5				
	33 UPIC	45 C	1242.1	1242.3	0.9				
	33 UPIC	45 C	1318.4	1319.4	2.3				
	33 UPIC	45 C	1326.6	1327.0	1.5				
24	2840 PEKG	4 S/F	0629.0	0633.9	14.0	36.8			
	3000 IZMI	7 C	0652.2	0652.8	2.0	2.0			
	3000 IZMI	42 SER	0728.2	0728.7	2.0	6.0			
	3000 IZMI	7 C	1150.5	1152.2	2.5	70.0			
25	2840 PEKG	5 S	0541.0	0547.0	9.0	12.2			
	2840 PEKG	1 S	0552.0	0556.0	8.0	5.2			
	33 UPIC	2 S/F	1324.3	1324.4	0.7				
	33 UPIC	4 S/F	1634.4	1634.7	0.7				
26	3000 IZMI	7 C	0639.5	0639.7	0.5	4.0			
	204 IZMI	8 S	1129.5	1129.8	0.5	58.0			

Reports are received routinely from the following observatories:

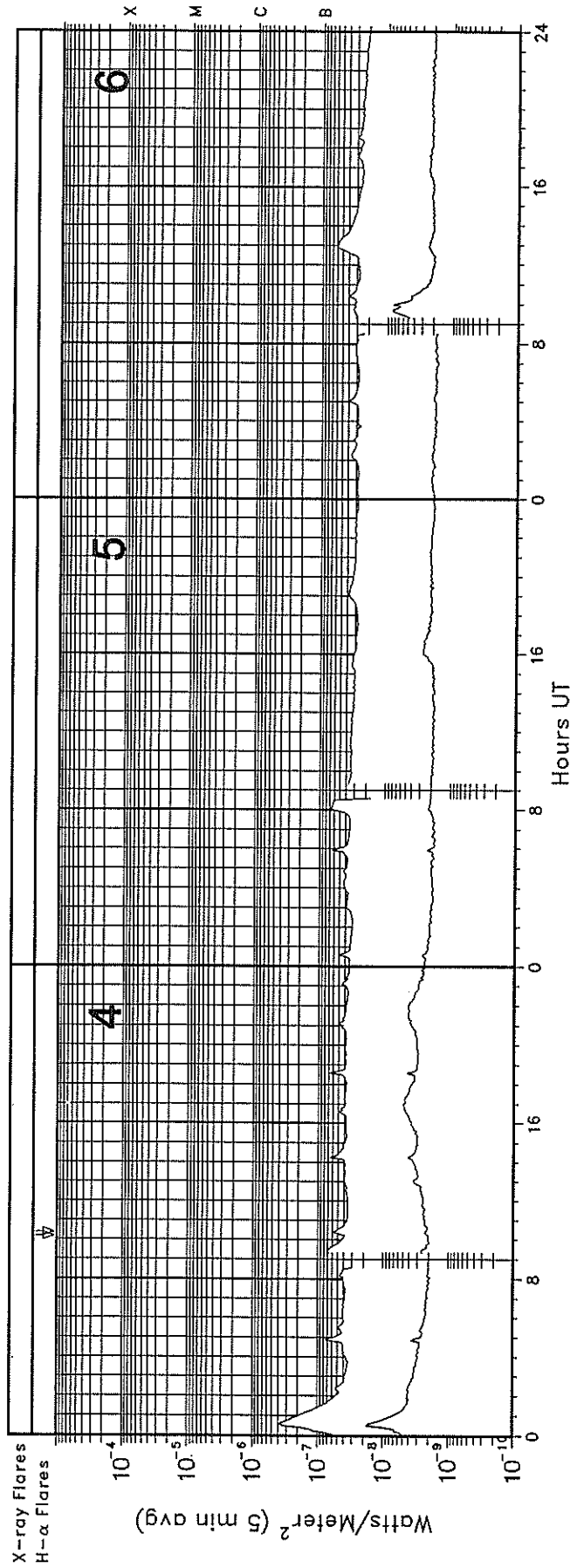
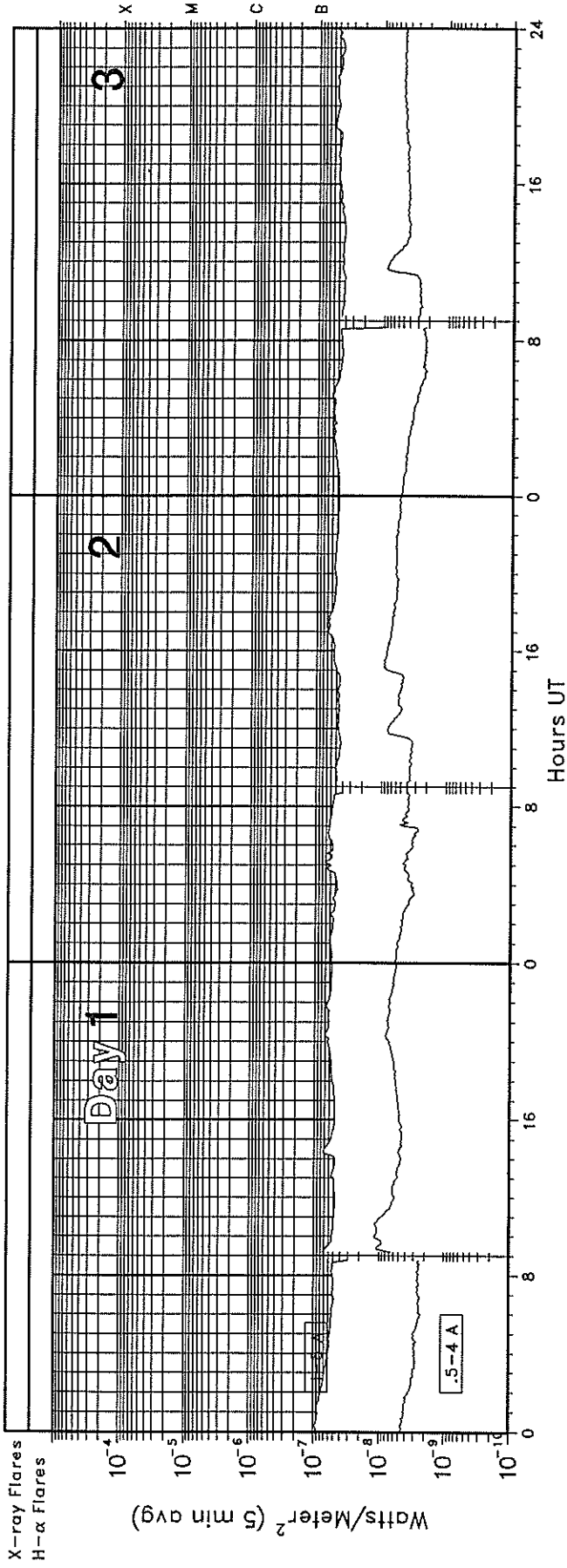
BERN = Berne	HUMN = Humain	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	IZMI = IZMIRAN	PEKG = Peking	TORN = Torun
CUBA = Havana	KISV = Kislovodsk	PALE = Palehua	TRST = Trieste
GORK = Gorky	KRAK = Krakow	PENT = Penticton	TYKW = Toyokawa
HIRA = Hiraiso	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HUAN = Huancayo	NOBE = Nobeyama	SGMR = Sagamore Hill	

Explanation of Type Code:

1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F	
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A	
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A	

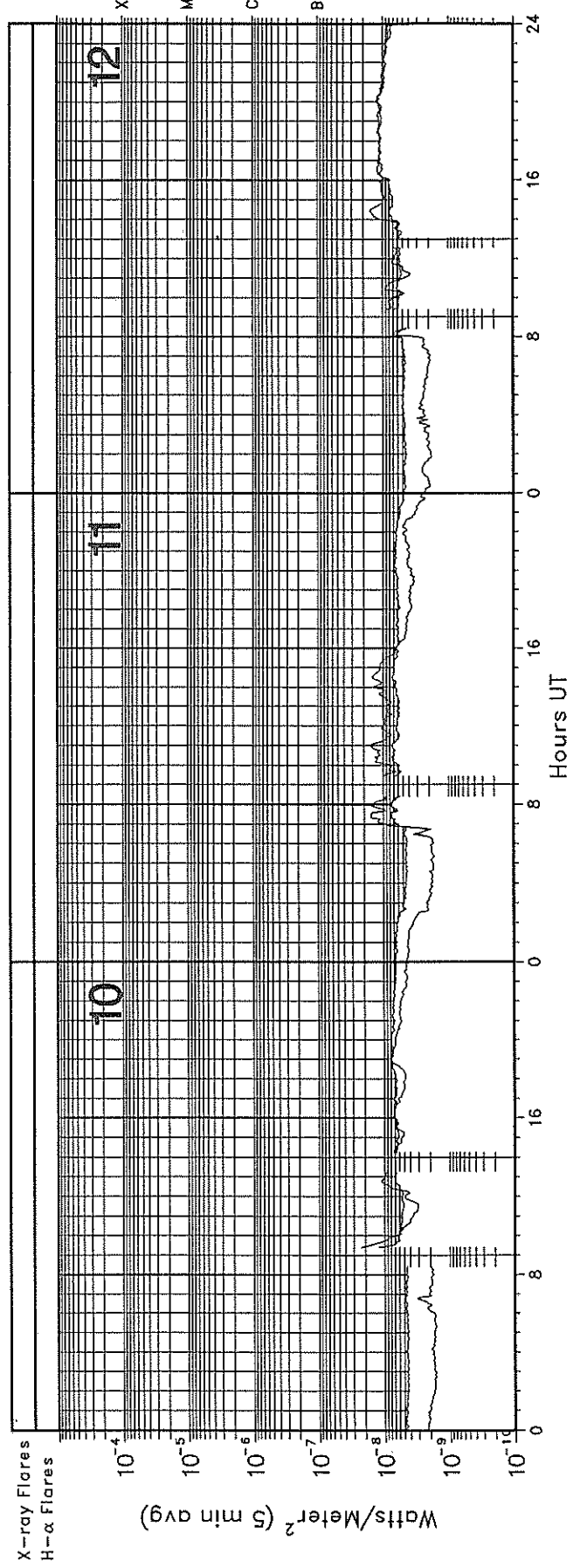
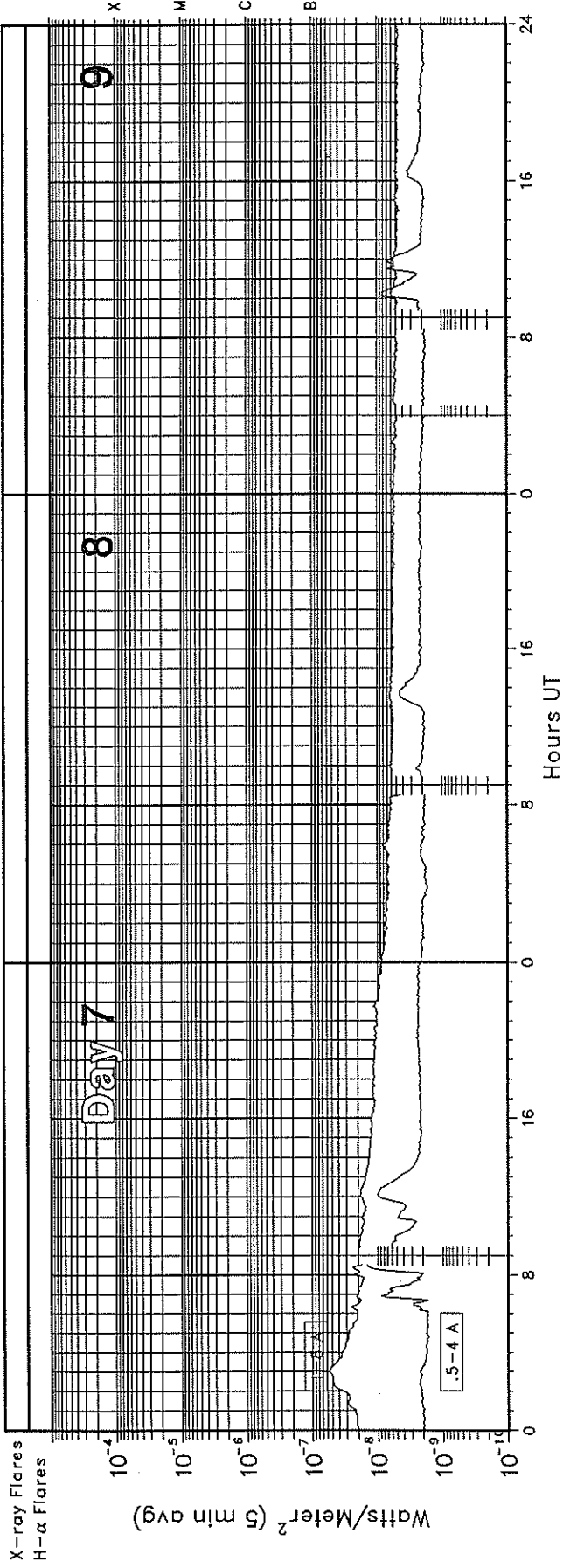
GOES-7 X-RAY DETECTOR

September 1996



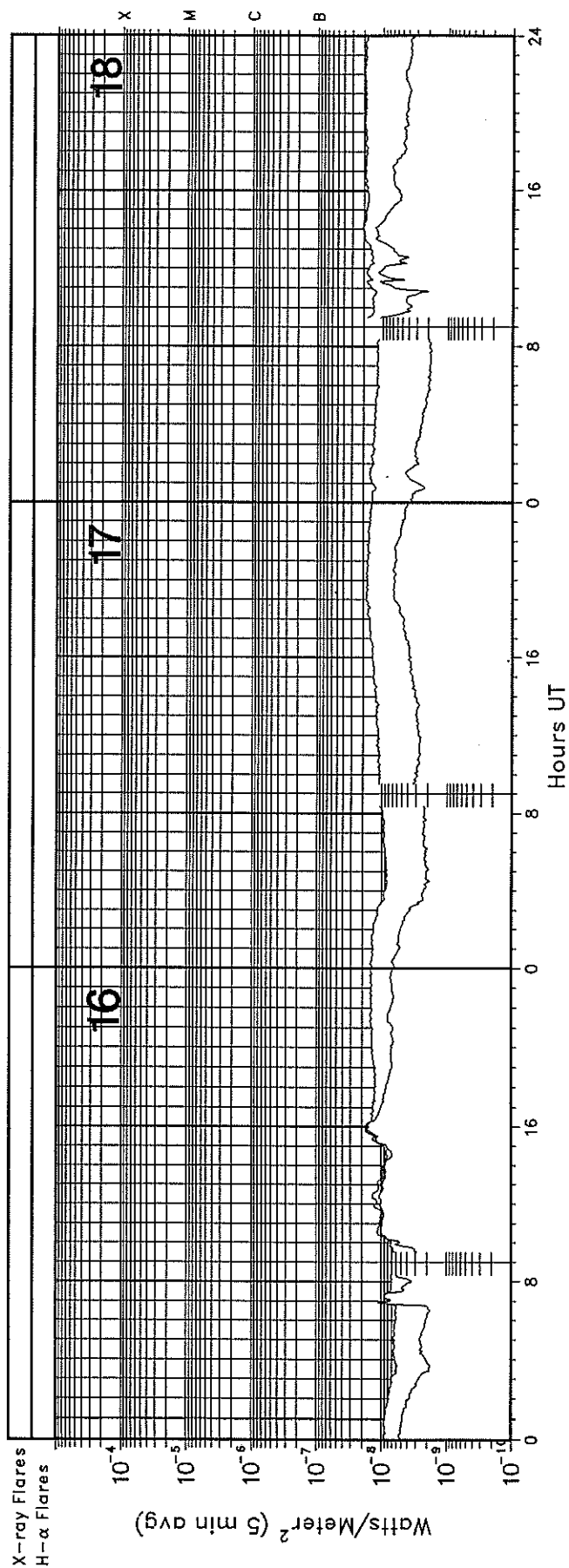
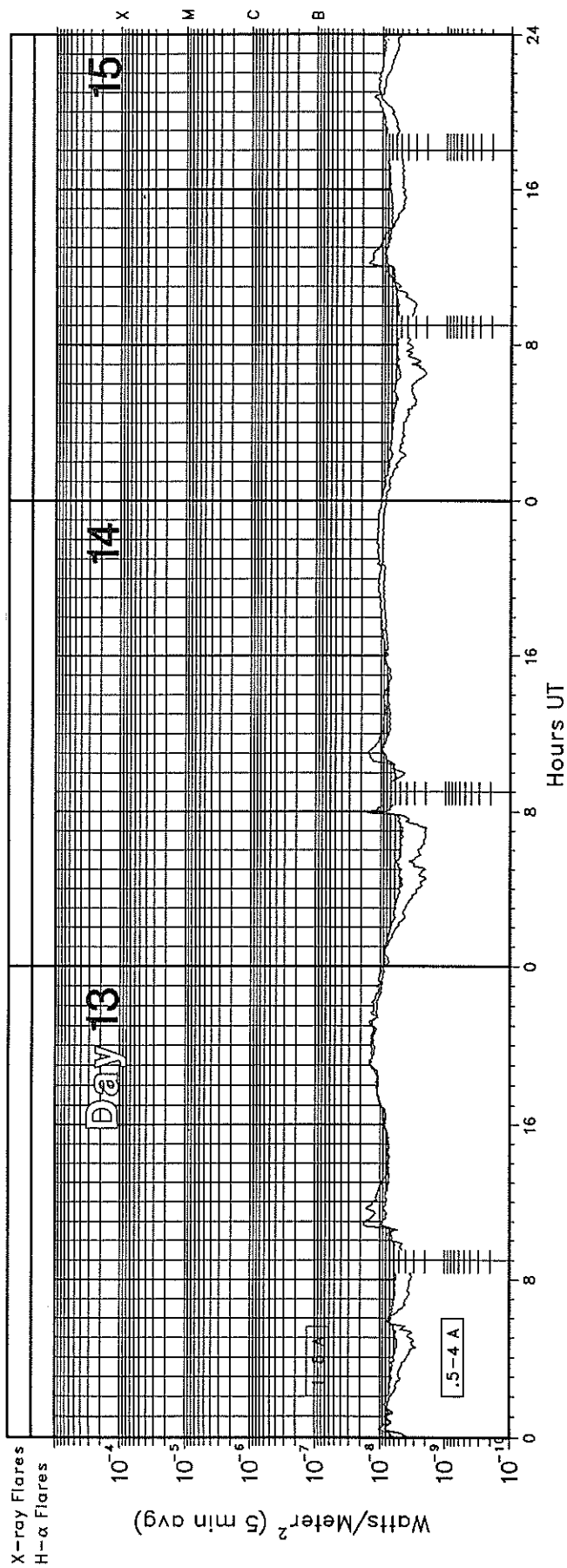
GOES-7 X-RAY DETECTOR

September 1996



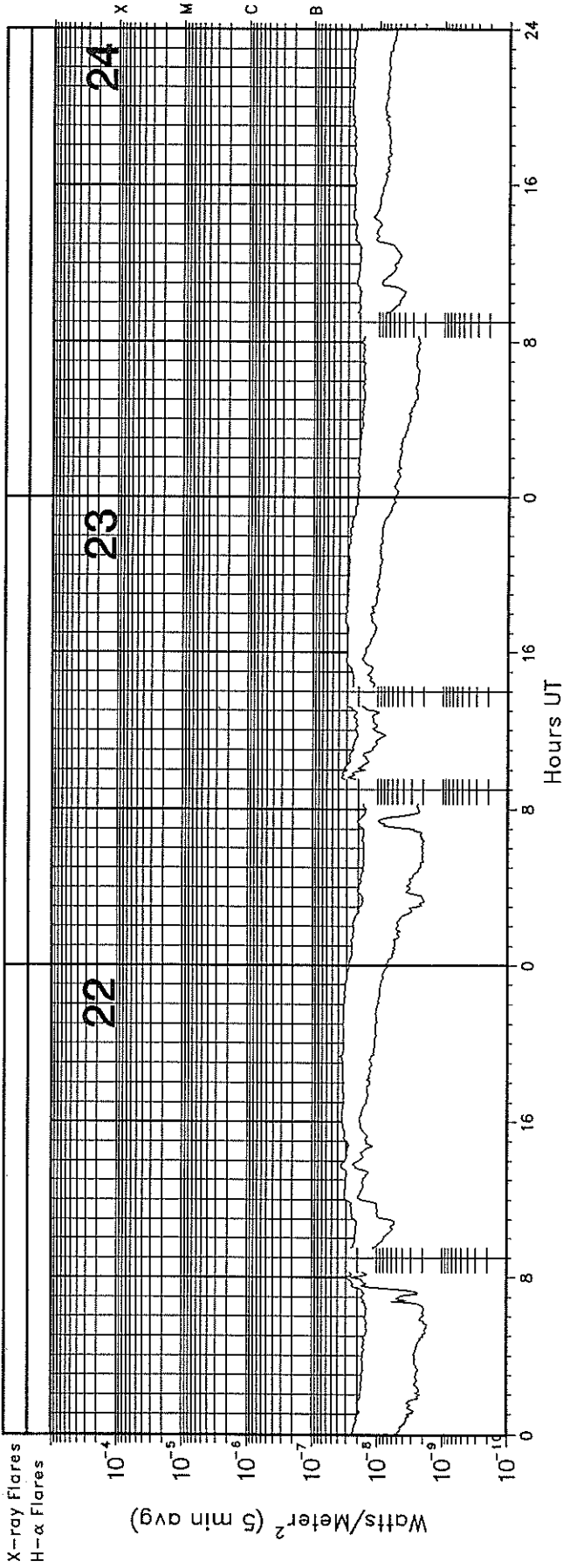
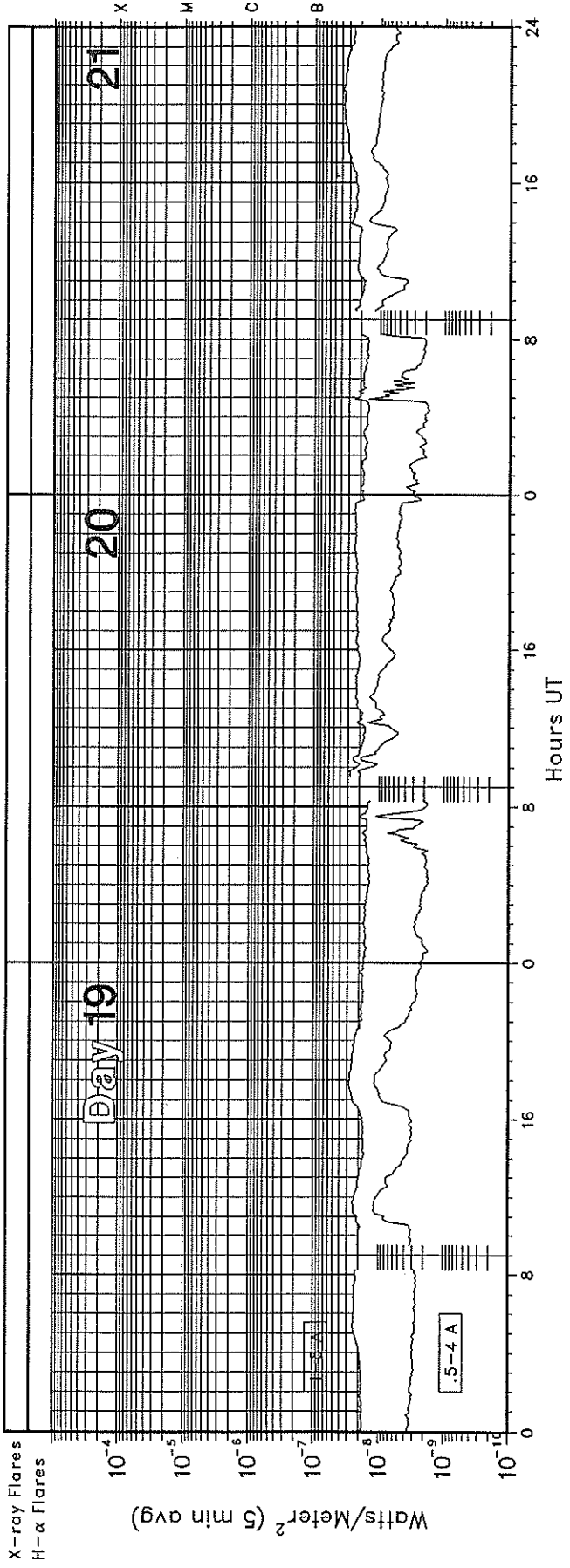
GOES-7 X-RAY DETECTOR

September 1996



GOES-7 X-RAY DETECTOR

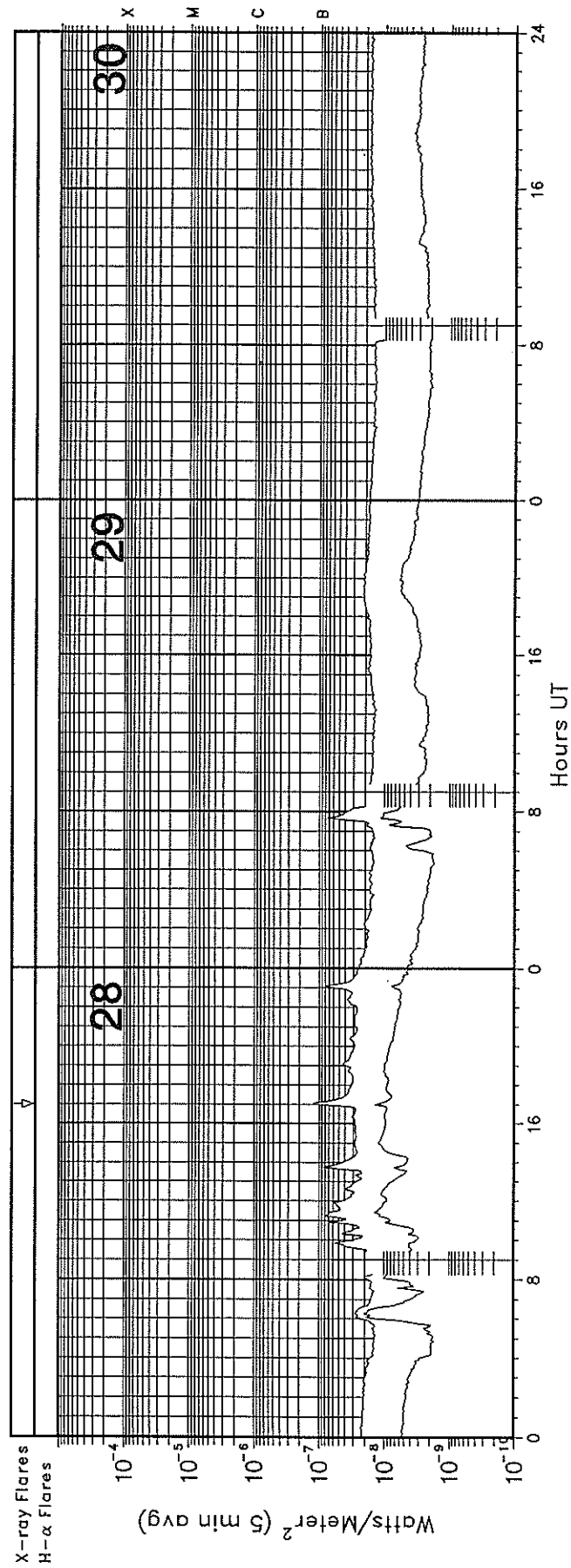
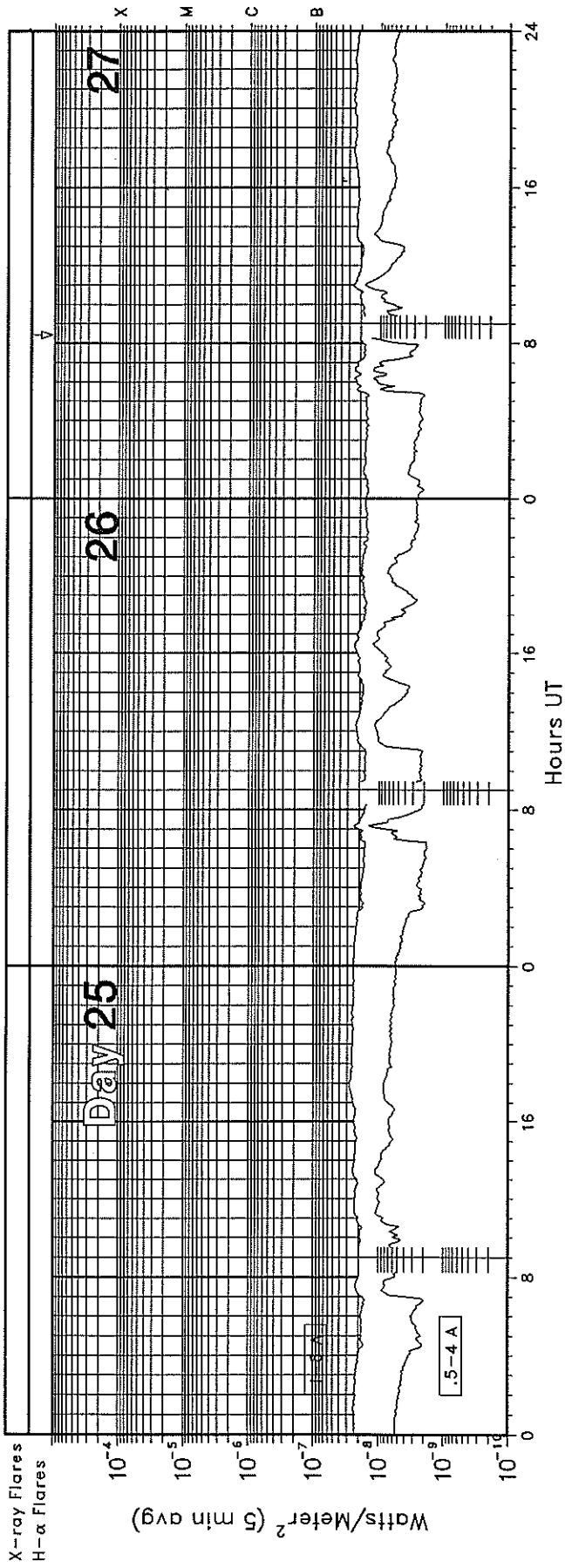
September 1996



GOES-7 X-RAY DETECTOR

September 1996

13
Sep 96



14
Sep 96

GOES SOLAR X-RAY FLARES
Preliminary Listing

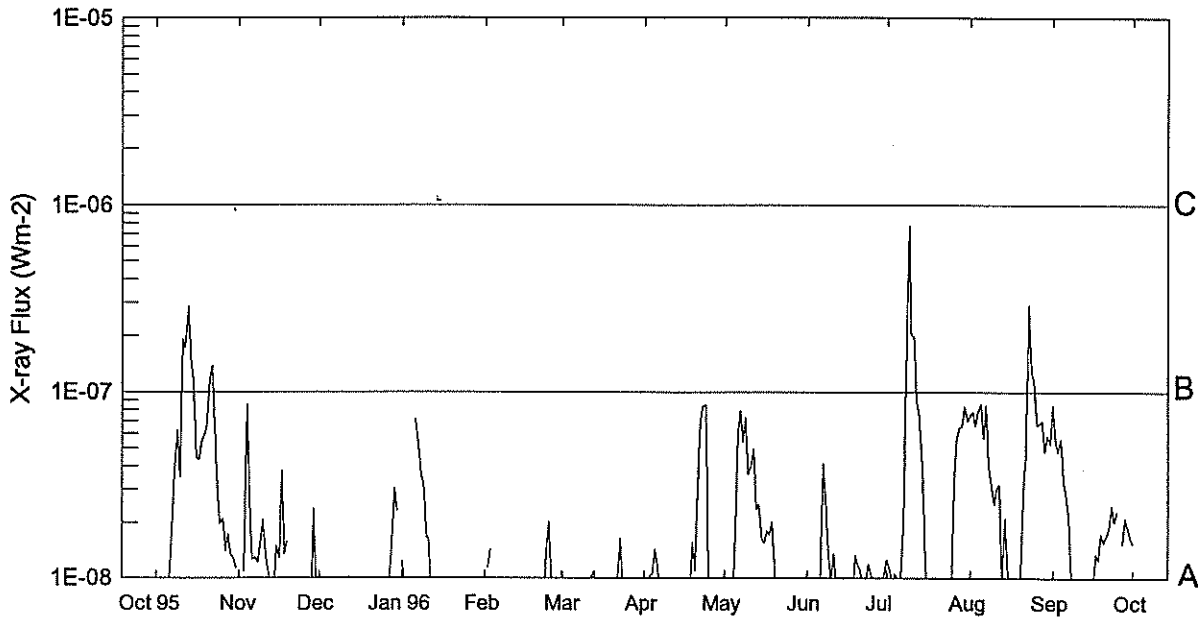
September 1996

Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	NOAA/ USAF Xray Region
28	1659	1704	1708			B1.6

Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	NOAA/ USAF Xray Region
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EDITOR'S NOTE: Please note that whenever optical flares are given, the times given are times of the optical flares and not the times of the X-ray flares. These data are taken directly from the NOAA SEC "Preliminary Report and Forecast of Solar Geophysical Data" weekly report.

Preliminary GOES Satellite Daily X-Ray Background Oct 95 - Sep 96



Day	Oct	Nov	Dec	Jan 96	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	<A1.0	A1.0	---	<A1.0	<A1.0	<A1.0	<A1.0	A1.2	A7.4	A8.5
2	<A1.0	---	---	<A1.0	A1.1	<A1.0	<A1.0	<A1.0	<A1.0	A1.1	A7.7	A5.5
3	<A1.0	A.0	---	<A1.0	A1.4	<A1.0	A1.0	<A1.0	<A1.0	<A1.0	A6.6	A4.7
4	<A1.0	A8.5	<A1.0	---	---	<A1.0	A1.0	<A1.0	<A1.0	A1.0	A7.8	A5.5
5	<A1.0	A2.6	<A1.0	---	---	<A1.0	A1.4	A1.3	<A1.0	<A1.0	A8.5	A3.2
6	<A1.0	A1.2	<A1.0	A7.1	---	<A1.0	A1.1	A5.9	A1.0	A1.0	A5.6	A2.7
7	A1.8	A1.2	<A1.0	A5.0	<A1.0	---	<A1.0	A7.8	A4.1	A1.8	A8.4	A2.1
8	A3.6	A1.2	<A1.0	A3.6	<A1.0	<A1.0	<A1.0	A5.3	A2.6	B1.2	A4.0	<A1.0
9	A6.2	A1.5	<A1.0	A3.1	<A1.0	<A1.0	<A1.0	A7.2	A1.4	B7.7	A3.0	<A1.0
10	A3.5	A2.0	<A1.0	A1.6	<A1.0	<A1.0	<A1.0	A3.6	<A1.0	B2.0	A2.4	<A1.0
11	B1.9	A1.2	<A1.0	A1.6	<A1.0	<A1.0	<A1.0	A4.0	A1.3	B1.9	A3.0	<A1.0
12	B1.7	A1.0	A1.0	<A1.0	<A1.0	A1.0	<A1.0	A4.9	<A1.0	A9.0	A3.1	<A1.0
13	B2.9	<A1.0	<A1.0	<A1.0	<A1.0	A1.0	<A1.0	A2.3	<A1.0	A7.4	<A1.0	<A1.0
14	B1.5	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A2.4	<A1.0	A3.9	A2.1	<A1.0
15	B1.1	A1.4	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.6	<A1.0	A1.5	A1.1	<A1.0
16	A4.3	A1.2	<A1.0	---	<A1.0	<A1.0	<A1.0	A1.5	<A1.0	<A1.0	<A1.0	<A1.0
17	A4.3	A3.7	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.8	<A1.0	<A1.0	<A1.0	A1.3
18	A5.3	A1.3	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.7	<A1.0	<A1.0	<A1.0	A1.2
19	A5.7	A1.5	---	<A1.0	<A1.0	<A1.0	A1.5	A2.0	A1.3	<A1.0	<A1.0	A1.7
20	A6.4	---	<A1.0	<A1.0	---	<A1.0	A1.1	A1.0	A1.1	<A1.0	A1.0	A1.5
21	B1.1	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A3.0	<A1.0	A1.1	<A1.0	A3.3	A1.7
22	B1.3	<A1.0	<A1.0	<A1.0	<A1.0	A1.0	A6.8	<A1.0	<A1.0	<A1.0	A4.3	A1.8
23	A6.4	<A1.0	---	<A1.0	<A1.0	A1.6	A8.3	<A1.0	<A1.0	<A1.0	B2.9	A2.4
24	A3.1	<A1.0	<A1.0	<A1.0	A1.3	<A1.0	A8.5	<A1.0	A1.2	<A1.0	B1.2	A1.9
25	A1.9	<A1.0	<A1.0	<A1.0	A2.0	<A1.0	A1.0	<A1.0	A1.0	<A1.0	B1.1	A2.2
26	A2.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A3.1	A6.6	---
27	A1.4	<A1.0	<A1.0	<A1.0	---	<A1.0	<A1.0	<A1.0	<A1.0	A5.5	A6.7	A1.5
28	A1.7	<A1.0	A1.3	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A6.4	A6.9	A2.1
29	A1.3	A2.3	A3.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A6.5	A4.7	A1.8
30	A1.2	<A1.0	A2.2	<A1.0	---	<A1.0	<A1.0	<A1.0	A1.0	A8.3	A5.7	A1.6
31	A1.1	---	---	---	---	<A1.0	---	<A1.0	---	A7.0	A5.2	---

16
Sep 96

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1996

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
01	ADF	0615E	0958	S02	W48	08 28.8	1	14	9	9	E	LEAR		
01	DSD	1114E	1222D	S11	W35	08 29.9		01	9	9	E	RAMY	7986	
01	ADF	1128E	2213	S07	W47	08 29.0	1	11	9	9	E	RAMY		
01	ADF	1305E	1856D	S08	W40	08 29.6	1	12	8	9	E	RAMY	7986	
01	ADF	1440E	0028	S01	W46	08 29.3	1	13	9	9	E	HOLL		
01	DSF	2040U	1259U	N46	W50	08 28.8	2	09	0	0	E	HOLL		
01	DSF	2130U	1104U	S12	W10	09 1.1	2	04	0	0	E	RAMY		
02	DSD	0550E	0710D	S21	W34	08 30.7		03	9	9	E	SVTO	7986	
02	ADF	0555E	1140D	S20	W37	08 30.5	1	12	9	9	E	SVTO	7986	
02	ADF	0557E	1505D	S06	W48	08 29.7	1	24	9	9	E	SVTO		
02	ADF	0710E	0735	S07	W54	08 29.2	1	08	9	9	V	KHAR		
02	BSD	0715	0730U	S19	W46	08 29.8	1		9	9	V	KHAR		
02	ADF	0810E	0958	N01	W69	08 28.3	1	19	9	9	E	LEAR		
02	APR	0848E	0915D	N16	E90	09 9.2	1		9	9	V	KHAR		
02	ADF	0848E	0915D	S05	W76	08 27.6	1		9	9	V	KHAR		
02	APR	1045E	1155D	S05	W90	08 26.6	1		9	9	V	KHAR		
02	ADF	1203E	2227	S01	W58	08 29.3	1	11	8	9	E	RAMY		
02	ADF	1259E	2315	N46	W50	08 29.5	1	07	6	7	E	HOLL		
02	ADF	1702E	0428	S02	W72	08 28.4	1	13	9	9	E	PALE		
02	DSD	1702E	1945D	N15	E18	09 4.1		02	4	4	E	RAMY	7987	
02	DSD	2053	2147	S15	W55	08 29.8		03	9	7	E	PALE	7986	
03	ADF	0016E	0951	S11	W54	08 30.0	1	08	5	5	E	LEAR	7986	
03	ADF	0040E	0951	S04	W59	08 29.7	1	13	6	8	E	LEAR		
03	AFS	0320E	0951	N16	E17	09 4.4		02	6	4	E	LEAR	7987	
03	AFS	0856E	1208	N16	E14	09 4.4		02	7	7	E	SVTO	7987	
03	ADF	1258E	2213	S03	W73	08 29.2	1	17	9	9	E	RAMY		
03	AFS	1315E	2213	N17	E12	09 4.5		02	6	4	E	RAMY	7987	
03	DSD	1415E	2213	S15	W73	08 29.2		05	9	9	E	RAMY	7986	
03	ADF	1416E	2213	S13	W62	08 30.0	1	05	5	9	E	RAMY	7986	
04	BSD	1010E	1036D	S03	W85	08 29.2		04	9	9	E	SVTO		
04	APR	1010E	1622	S04	W90	08 28.8	1		9	9	E	SVTO		
04	APR	1715E	0415	S04	W90	08 29.1	1		9	9	E	PALE		
04	AFS	1800E	2350D	N19	E01	09 4.8		02	9	9	E	PALE	7987	
04	APR	2321E	0957	S03	W90	08 29.3	1		7	6	E	LEAR		
05	CAP	0822E	1013D	S13	W90	08 29.6	1	4			P	WROC		
05	APR	1023E	1715	S04	W90	08 29.8	1		9	8	E	RAMY		
05	APR	1023E	1715	S13	W90	08 29.7	1		8	8	E	RAMY	7986	
05	APR	1415E	2136	S12	W90	08 29.9	1		9	9	E	HOLL	7986	
05	APR	1420E	2136	S03	W90	08 30.0	1		9	9	E	HOLL		
06	APR	0620E	1658	S03	W90	08 30.6	1		9	9	E	SVTO		
06	APR	0754E	1658	S12	W90	08 30.6	1		9	9	E	SVTO		
06	APR	1042E	1950D	S12	W90	08 30.8	1		9	7	E	RAMY		
06	APR	1042E	2141	S03	W90	08 30.8	1		7	7	E	RAMY	7986	
06	APR	1350E	0048	S11	W90	08 30.9	1		9	9	E	HOLL	7986	
06	AFS	1840E	0048	S25	E17	09 8.1		01	9	9	E	HOLL		
06	AFS	1900E	2141	S25	E18	09 8.2		01	8	6	E	RAMY		
06	AFS	2255E	0957	S26	E14	09 8.0		01	9	9	E	LEAR		
07	AFS	0001E	0313	S25	E15	09 8.2		01	9	9	E	PALE		
07	AFS	0518E	1135	S24	E13	09 8.2		01	9	9	E	SVTO	7988	
07	AFS	1107E	2224	S25	E09	09 8.2		01	9	9	E	RAMY	7988	
07	DSD	1243E	1412D	S26	E09	09 8.2		03	9	9	E	RAMY	7988	
07	AFS	2341E	0150D	N00	W26	09 6.0		01	7	7	E	LEAR	7988	
08	ADF	0321E	0755D	N27	W46	09 4.5	1	09	7	9	E	LEAR		
09	DSD	0850E	1015D	S25	W19	09 7.9		01	7	8	E	SVTO	7988	
09	DSD	0920U	0934	S24	W16	09 8.2	1		9	9	V	KHAR		
09	ADF	1430E	1615D	S25	W16	09 8.4	1	06	9	9	E	SVTO	7988	
11	AFS	1834E	0134	N29	E30	09 14.1		02	6	9	E	PALE		
12	AFS	1032E	1302	N28	E19	09 13.9		01	9	9	E	SVTO	7989	
12	AFS	1046E	2012D	N26	E22	09 14.1		01	8	6	E	RAMY	7989	

ACTIVE PROMINENCES AND FILAMENTS

17
Sep 96

SEPTEMBER 1996

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/USAF Reg#	Remarks
14	ADF	0705E	1430D	N27	W01	09 14.2	1	05	7	7	E	SVTO 7989	
14	DSF	0924U	2334U	N34	W60	09 9.6	1	05	0	0	E	LEAR	
14	DSF	0929U	2339U	N27	W02	09 14.2	1	05	0	0	E	LEAR	
14	DSF	2015U	1045U	N33	W67	09- 9.5	2	07	0	0	E	RAMY	
16	AFS	2135E	0103	S06	W23	09 15.2		01	9	5	E	HOLL	
19	ADF	0818E	1423	S15	E38	09 22.2	1	11	7	7	E	SVTO	
20	DSF	0002U	1338U	S34	E28	09 22.2	2	08	0	0	E	HOLL	
20	ADF	0500E	1002	N07	E19	09 21.6	1	12	5	4	E	LEAR	
20	APR	0705E	1230D	S11	E90	09 27.1	1		7	8	E	SVTO	
20	ADF	1127E	1530D	S08	E15	09 21.6	1	10	9	7	E	RAMY	
21	ADF	0210E	0959	S09	E07	09 21.6	1	18	8	5	E	LEAR	
22	DSF	2029U	1038U	S18	W12	09 21.9	2	05	0	0	E	RAMY	
22	DSF	2038U	1115U	S18	E49	09 26.6	2	07	0	0	E	RAMY	
22	DSF	2317U	1648U	S14	E41	09 26.1	2	09	0	0	E	PALE	
23	ADF	0620E	0900D	S20	W18	09 21.9	2	10	7	8	E	SVTO	
23	DSF	0900U	0930	S20	W17	09 22.1	2	10	7	8	E	SVTO	
24	AFS	1441E	2011D	S05	E33	09 27.1		01	9	9	E	RAMY	
25	ADF	0845E	1005	S04	E03	09 25.6	1	15	8	6	E	LEAR	
26	ADF	0430E	0939	S12	E03	09 26.4	1	12	5	5	E	LEAR	
26	ADF	0715E	0939	N02	W22	09 24.6	1	15	5	4	E	LEAR	
27	ADF	0540E	0959	N02	W34	09 24.7	1	15	6	4	E	LEAR	
27	DSD	0828E	0909D	S05	W03	09 27.1		03	9	9	E	SVTO	
27	ADF	1315E	1900	S21	W15	09 26.4	1	03	5	7	E	RAMY	
28	AFS	0634E	1230D	S06	W12	09 27.4		01	6	7	E	SVTO	
28	ASR	0939E	1519	S12	W90	09 21.6			9	9	E	SVTO	
28	DSF	1005U	2305U	S17	W27	09 26.4	2	05	0	0	E	LEAR	
28	ASR	1038E	1811	S09	W90	09 21.7			9	9	E	RAMY	
28	ASR	1420E	2315D	S04	W90	09 21.9			6	8	E	HOLL	
28	ADF	1648E	2244	S23	W28	09 26.5	1	04	3	5	E	PALE	
28	ADF	2030	2244	S01	W50	09 25.1	1	04	9	9	E	PALE	

ADF = Active Dark Filament
AFS = Arch Filament System
APR = Active Prominence
ASR = Active Surge Region
BSD = Bright Surge on Disk

BSL = Bright Surge on Limb
CAP = CAP Prominence (Tandberg-Hanssen)
CRN = Coronal Rain
DSD = Dark Surge on Disk
DSF = Disappearing Solar Filament

EPL = Eruptive Prominence on Limb
LPS = Loops
MDP = Mound Prominence
SDF/DSF = Sudden Disappearing Filament
SPY = Spray
SSB = Solar Sector Boundary

For SOLAR SECTOR BOUNDARY REPORTS, the latitude field contains the Carrington longitude of the point where a neutral line crosses the solar equator. The comments field may contain the Carrington longitude and central meridian distance of two more intersection points.

The EXTENT field for limb events is the radial extent above the limb in hundredths of solar radius. For disk events this field contains the heliographic extent in whole degrees.

The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time.
The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

Observation Type: C= Cinematographic, E= Electronic, P= Photographic, V= Visual.

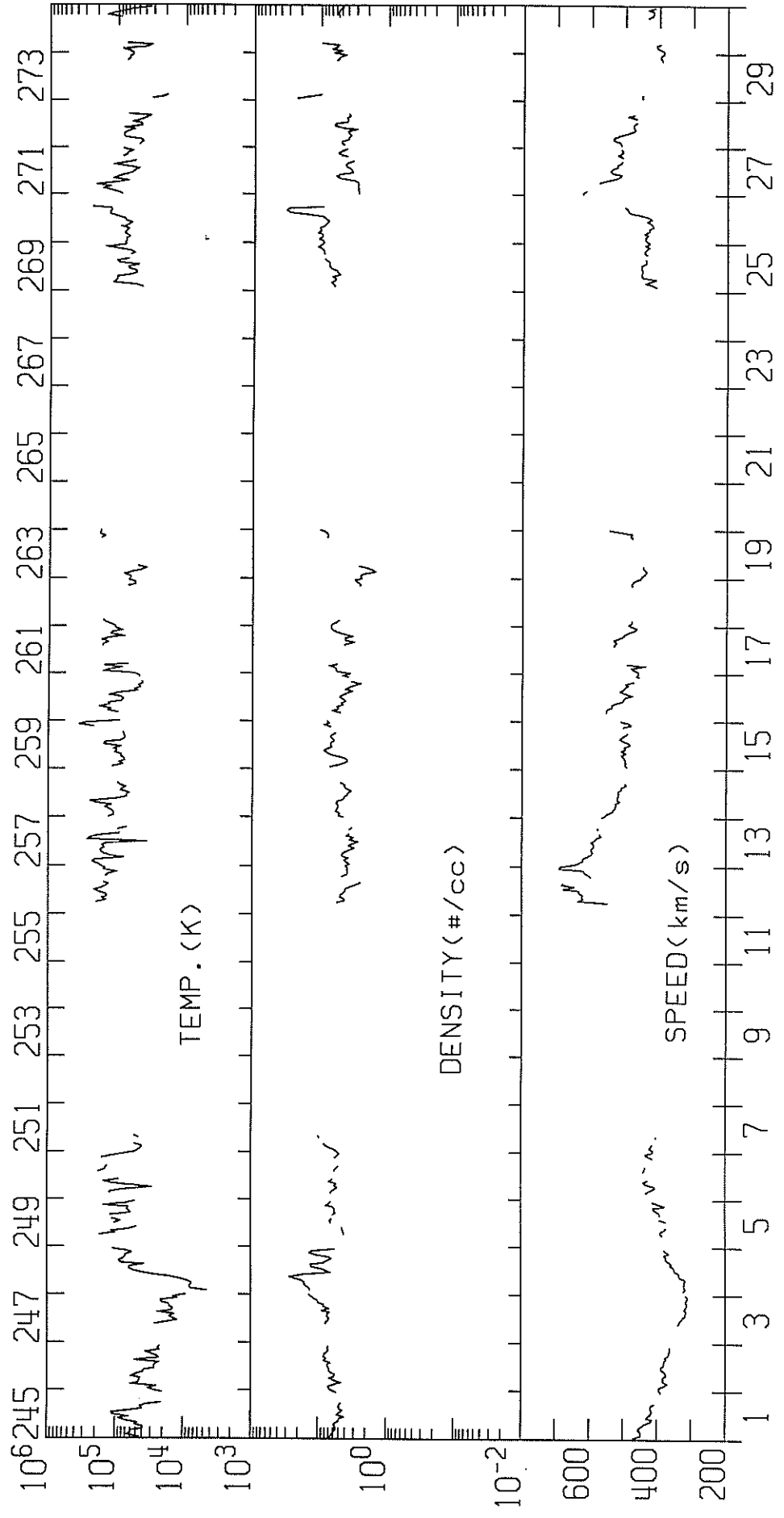
ABST = Abastumani
ATHN = Athens
BUCA = Bucharest
CATA = Catania

HOLL = Holloman
KHAR = Kharkov
LEAR = Learmonth
PALE = Palehua

RAMY = Ramey
SVTO = San Vito
VORO = Voroshilov
VALA = Valasske Mezirici
WROC = Wroclaw

IMP 8 SOLAR WIND PLASMA
SEPTEMBER 1996

MIT/CSR IMP 8 PLASMA PARAMETERS



SEP 1996

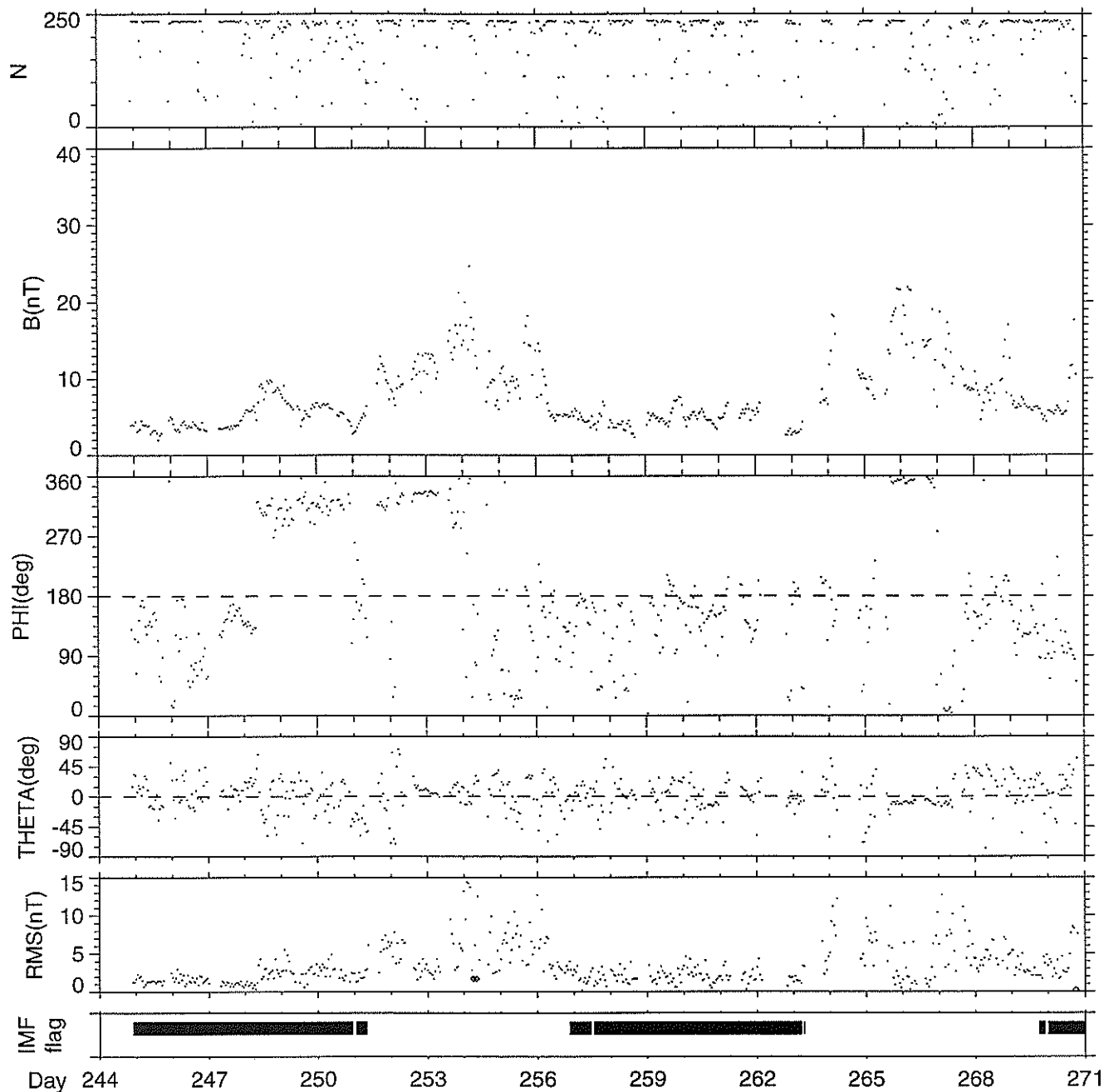
IMP 8 MIT ONE-HOUR AVERAGES

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

(c) DOY 244 - 271

August 31 1996 - September 27 1996



Generation Date : Wed Feb 19 08:10:32 1997

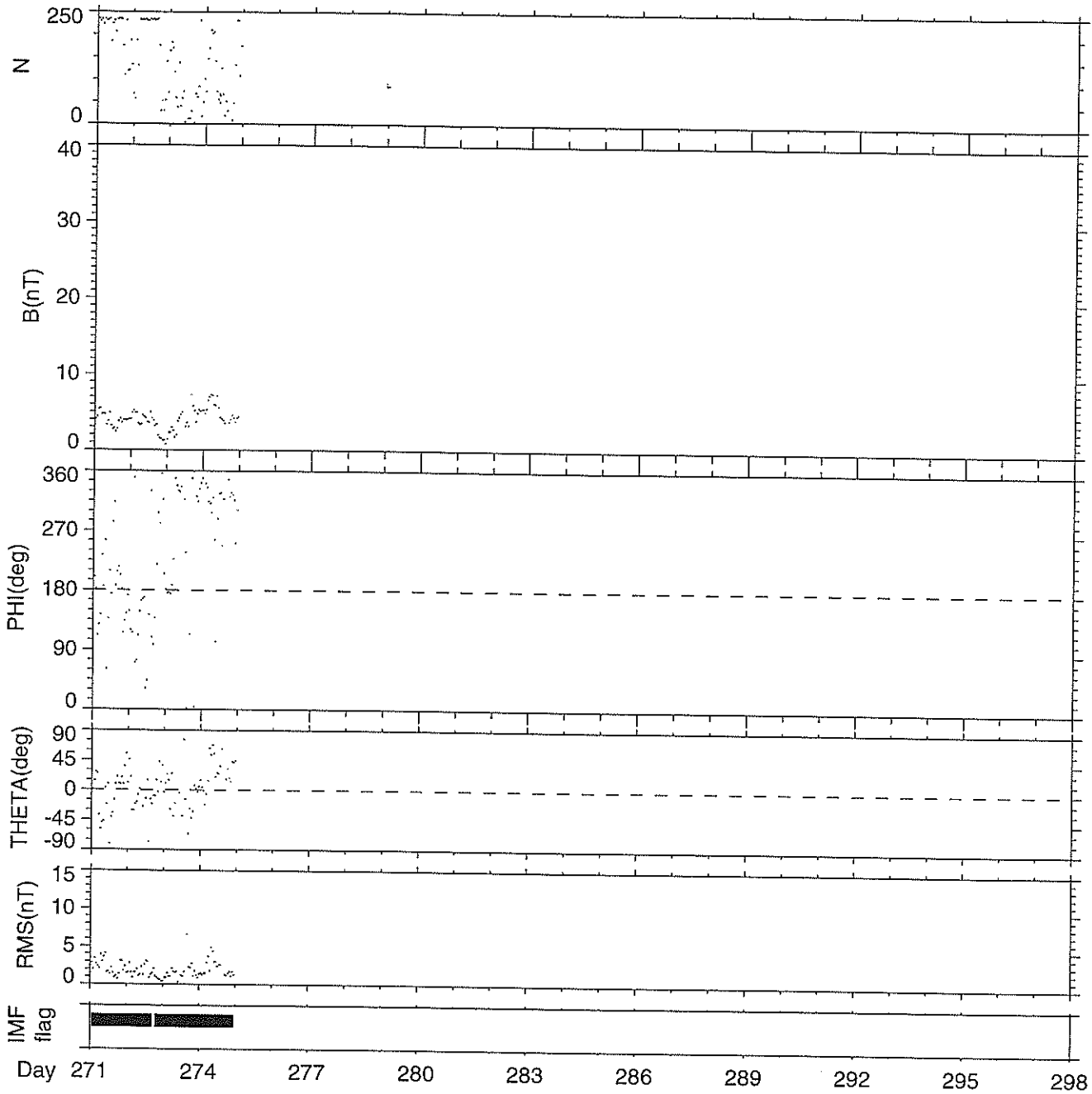
NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

(c) DOY 271 - 274

September 27 1996 - September 30 1996



Generation Date : Wed Feb 19 08:10:32 1997

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

CONTENTS

Comprehensive Reports

Number 631 Part II

MISCELLANEOUS DATA

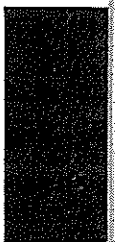
Page

*****NEW DATA*****

SAN FERNANDO OBSERVATORY CALCIUM II K-LINE FACULAR DATA

January 1992-December 1996

Descriptive Text	22
Tables	23-62



San Fernando Observatory Calcium II K-line Facular Data

The K-line data presented here were obtained from photometric images taken at the San Fernando Observatory (SFO) with a 2.5 cm telescope and photometer known as the Cartesian Full Disk Telescope No. 1 (CFDT1). The system and the method of acquiring these data are described more fully in Chapman, et al. (1992,1996). The filter used in these observations has a FWHM of 1 nm centered on the Ca II K-line (3934 nm).

Facular pixels in the K-line are determined by the following procedure. The quiet sun limb darkening is first removed from flattened images, then pixels having a contrast greater or equal to 4.8% are identified as facular. This value is approximately 3 times the standard deviation of the quiet sun near disk center. Since facular contrast is observed to increase toward the limb, the 4.8% criterion is increased as the inverse of mu to compensate for this contrast increase.

The facular area is corrected for foreshortening and is in millionths of a solar hemisphere.

The various irradiance indices derived from the K-line images are as follows:

The index called PFIFX is the excess spectral irradiance in the K-line. The measured contrast of each facular pixel is weighted by the quiet sun intensity at that disk position and all such quantities for the solar disk are summed. This index should correspond to the spectral irradiance measured by a spacecraft in this band.

The remaining indices are for modeling variations in total solar irradiance. PFIF, PFIFA, PFIFB, and PFIFC differ in the assumed contrast of faculae at the center of the solar disk and are based on a simple center-to-limb variation in contrast. PFIFSOFIA is from Sofia, et al. (1982); PFIFOUK is from Foukal (1981); and PFIF2 is from Lawrence and Chapman (1988). These last three differ somewhat in their assumed center-to-limb variation.

In conclusion, for variations in spectral irradiance, use PFIFX. For variations in total irradiance, use of PFIF, PFIFA, PFIFB, PFIFSOFIA, or PFIFOUK is recommended.

REFERENCES:

Chapman, G.A., Herzog, A.D., Lawrence, J.K., Walton, S.R., Hudson, H.S., and Fisher, B.M., **J. Geophys. Res.** **97**, 8211, 1992.

Chapman, G.A., Cookson, A.M., and Dobias, J.J., **J. Geophys. Res.** **101**, 13541, 1996.

Foukal, P, in **Physics of Sunspots**, L.E. Cram and J.H. Thomas, eds. Sacramento Peak Obs., Sunspot, NM, p.391, 1981.

Lawrence, J.K. and Chapman, G.A., **Ap. J.** **335**, 996, 1988.

Sofia, S., Oster, L., and Schatten, K.H., **Solar Phys.** **80**, 87, 1982.

SAN FERNANDO OBSERVATORY
1992 Ca II K-line Facular Data
 WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
1-Apr-92											
2-Apr-92											
3-Apr-92											
4-Apr-92											
5-Apr-92											
6-Apr-92											
7-Apr-92											
8-Apr-92	20:04:00	220781.6	18146.5	3232.5	227.9	104.5	-19.1	105.7	598.3	173.4	168.5
9-Apr-92											
10-Apr-92											
11-Apr-92	20:40:03	220393	20571.9	3519.8	304.7	172.5	40.4	128.5	701.2	285.4	204.4
12-Apr-92	18:16:40	220400.1	18345.7	3062.8	254.7	134.4	14	110.1	615.8	209	176.2
13-Apr-92											
14-Apr-92											
15-Apr-92											
16-Apr-92	19:31:37	219882.9	23677.2	4054.2	353.1	201.4	49.7	148.3	808.1	330.7	236.4
17-Apr-92											
18-Apr-92											
19-Apr-92	17:46:43	219500.2	26612.1	4288	429.5	266.8	104.1	166.2	917.7	349.5	276.1
20-Apr-92											
21-Apr-92	17:40:04	219372.9	33570.8	5800.6	537.8	329.4	120.9	215.9	1163	531.4	343.2
22-Apr-92	19:32:09	219110.5	27865.8	5052.4	338.3	145.4	-47.6	160.3	917.1	334.2	229.2
23-Apr-92	20:56:14	218986.8	31799.7	6021.9	351.9	127	-98	175	1027	263	262.2
24-Apr-92											
25-Apr-92											
26-Apr-92	18:07:30	218654.1	24285.2	4457	295.4	127.3	-40.9	140.3	799.9	292.9	201.9
27-Apr-92	18:48:34	218718.2	20720.3	3485.9	332.7	204.3	75.9	132.9	717.9	326.4	211.2
28-Apr-92											
29-Apr-92											
30-Apr-92	21:38:52	218116.2	11828.6	1857.4	192.8	120.6	48.4	75.5	409.3	156.9	128.4
1-May-92	20:14:34	218053.9	11308	1871.4	172.9	101.1	29.3	71.8	388.4	173.2	112.6
2-May-92											
3-May-92											
4-May-92	18:36:53	217836	11517.5	1832.5	199.4	132	64.6	73.6	401.5	132.7	133.3
5-May-92											
6-May-92											
7-May-92											
8-May-92	21:03:59	217278.9	13463.6	2463.8	161.5	68.2	-25.1	77	441.2	137.7	115.8
9-May-92											
10-May-92											
11-May-92											
12-May-92	20:38:30	216894	14904.5	2241.3	283.9	200	116.1	103.1	535.7	266.6	177.6
13-May-92	19:00:34	216861.8	13906.7	2032.2	251.6	171.1	90.6	93	492.9	223.3	159.2
14-May-92											
15-May-92											
16-May-92											
17-May-92	17:58:04	216577	17605.3	2769.8	259.7	146.4	33.2	109	599.5	248.3	169.8
18-May-92	19:54:30	216454.1	16771	2668.6	249.6	141.9	34.2	104.6	572.7	249.7	161.1

SAN FERNANDO OBSERVATORY

1992 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
1-Jul-92											
2-Jul-92	20:47:29	214210	11792.9	2106.6	177.2	101.5	25.7	74.1	404.4	195.8	109.5
3-Jul-92											
4-Jul-92	22:25:30	214363.1	9995.4	1723.5	96.9	23.9	-49.2	52.6	316	55.1	79.4
5-Jul-92	17:26:30	214444.1	11703.2	2026.4	131.7	50.3	-31.1	62.3	375.8	56.8	101
6-Jul-92											
7-Jul-92											
8-Jul-92											
9-Jul-92	18:51:18	214389.5	20404.1	3172	404.4	293.2	182	141.9	737.9	344.6	254.6
10-Jul-92											
11-Jul-92											
12-Jul-92											
13-Jul-92											
14-Jul-92											
15-Jul-92											
16-Jul-92	22:47:15	214978.5	22572.6	3938.3	351.7	211.4	71.1	140.5	772.6	264	239.9
17-Jul-92	19:17:00	214346	19033.2	3428.7	282.3	161.9	41.5	114.6	643.5	185.5	196.9
18-Jul-92	22:36:03	214583.5	13707.4	2449.1	168.7	74.9	-18.9	77	450.2	145.5	112
19-Jul-92	18:42:00	214471	10668.8	1850.1	138.6	66.2	-6.3	63.4	356	150	90.3
20-Jul-92	20:27:01	214503.9	11449.3	1820.2	199.9	131.9	63.9	76.5	403.9	194.9	126.2
21-Jul-92											
22-Jul-92	22:10:35	214759	9004.2	1273.2	160.5	108.9	57.4	56.7	315.3	110.7	100
23-Jul-92	23:09:00	214730.3	4879.1	755.6	61.4	28	-5.3	28.4	161.4	58.8	41.6
24-Jul-92	20:48:00	214529.3	4917.9	805.6	55.2	20.4	-14.4	27.3	159.5	48	39.4
25-Jul-92	21:15:43	214611.2	4494.7	664.2	67.4	39	10.6	27.3	152.6	50.9	45.5
26-Jul-92	18:26:30	214860.1	6249.6	947.4	93.3	53.9	14.4	37.9	211.5	58.8	66.2
27-Jul-92											
28-Jul-92	20:36:00	214658.2	7538.9	1141	137	92.9	48.9	51.8	269.2	146.3	84.1
29-Jul-92	20:40:00	214771.9	8689.7	1423	129.8	73.9	18	54.5	297.5	139.5	81.6
30-Jul-92	20:29:30	214918.3	7546.4	1338.3	60.4	2.6	-55.2	37.8	233.8	47.4	49.3
31-Jul-92	20:01:00	214836.5	8444.7	1495.5	59.4	-6.4	-72.3	40.4	257	27.9	54
1-Aug-92	20:58:41	215002.5	8107.9	1377.7	85.8	27.7	-30.4	44.3	259.9	57.6	67.9
2-Aug-92	18:56:30	215057.2	9850.9	1575.7	127.1	61	-5.2	56.2	325.6	99.2	86.5
3-Aug-92	20:25:30	215126.5	13815.7	2135.1	249	169	89	91.6	489.1	221.3	155.2
4-Aug-92	20:07:00	215279.7	16234.3	2518.7	303.1	210.4	117.8	111.6	581.1	289.9	190
5-Aug-92	20:58:00	215144.8	16062.4	2557	273.4	176.7	79.9	106.4	563.6	266.3	174.6
6-Aug-92	20:02:30	215296.7	14270	2342.8	226.4	138.3	50.1	88.5	490.9	194.9	142.7
7-Aug-92	21:02:30	215302.5	15610.6	2780.4	189	81.6	-25.9	87.6	511.4	158.7	128.7
8-Aug-92	20:42:26	215512.3	16748.6	3035.5	198.6	82	-34.6	95.5	548.3	177.8	141
9-Aug-92	19:26:30	215451	17652.2	2831.9	276.3	166.1	55.9	110.6	607	252.1	176.8
10-Aug-92	20:05:20	215585	17451.5	2885.9	272.6	162.9	53.2	110.5	601.6	277.9	170.3
11-Aug-92	21:10:00	215757.9	16470.8	2765	252.6	148.1	43.6	104.6	566	250.6	164.8
12-Aug-92	21:22:30	215628	14272.8	2241	228.4	141	53.5	88.4	490.7	176.8	148.3
13-Aug-92	20:12:40	215839.7	14388.9	2261.9	250.7	166.3	81.8	93.2	504.1	195.8	162.7
14-Aug-92	20:54:00	215823.8	13826.3	2409.6	209.4	121.1	32.7	87.4	474.4	218.1	134.2
15-Aug-92											
16-Aug-92	20:21:10	216059.2	14438	2484.7	245.1	158.5	71.9	93.8	504.9	223	155.1
17-Aug-92	20:19:30	215994.2	13571.9	2353.8	232.4	151.3	70.3	90	475.5	196.8	156.9

SAN FERNANDO OBSERVATORY
1992 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
18-Aug-92	20:47:00	216156.9	10848.7	2016.4	152.9	82.9	13	62.9	362.8	98.7	103.8
19-Aug-92	20:27:01	216187.4	8406.3	1784.8	61.9	-3.5	-69	40.9	258.1	51.1	50
20-Aug-92	20:40:00	216533.6	9120.2	1868	91.1	24.4	-42.3	49.5	291.4	84.3	68.3
21-Aug-92	20:25:30	216466.9	9326.3	1709.6	142.6	83.7	24.8	59.2	319.3	119.8	99.7
22-Aug-92	20:17:30	216494.6	9690.6	1528.2	199.8	149	98.3	67.1	352.1	146.7	126.1
23-Aug-92	18:57:56	216549.6	6898.5	1028	134.6	96.8	59.1	45.9	247.9	117.8	77.9
24-Aug-92	21:38:00	217069.4	6090.9	910.6	114.6	79.7	44.9	42.6	219.2	121.3	70.5
25-Aug-92	20:33:30	216895.5	7272.5	1059.1	125.6	82.3	39.1	47.8	255.5	117.2	79.2
26-Aug-92	20:14:32	216923.5	6507.5	1067.6	68.8	22	-24.8	35.3	209.3	63.3	48.4
27-Aug-92	21:02:30	217211.4	6055.2	998.3	56.7	11.8	-33	31.9	191.2	43.4	44.8
28-Aug-92											
29-Aug-92											
30-Aug-92											
31-Aug-92	21:18:03	217382.9	8467.5	1269.7	141.3	89.4	37.5	56.3	296.9	153.8	88.6
1-Sep-92											
2-Sep-92											
3-Sep-92	22:34:00	218373.6	9364.4	1562.8	111.3	46.5	-18.3	52.1	305.6	87.8	77.7
4-Sep-92	20:00:30	217787.3	8374.8	1481.4	85.3	24.5	-36.4	45.1	267.9	76.7	62.1
5-Sep-92											
6-Sep-92	18:33:00	218065.7	8780.7	1406.3	128.5	71.5	14.5	55.1	299.6	136.7	83.5
7-Sep-92											
8-Sep-92											
9-Sep-92											
10-Sep-92	21:10:30	218663.2	11251.7	1918.4	179.4	109	38.6	73.6	390.8	193.5	114.9
11-Sep-92	20:30:00	218672.7	10989.8	2019.6	132.5	55.9	-20.6	63.2	362.1	147.8	85.4
12-Sep-92	18:38:59	218822.6	11892.6	2133.3	141.3	58.8	-23.6	66.7	388.6	118	98.5
13-Sep-92	18:34:30	218843.8	13516.6	2357.4	178.5	88.4	-1.7	79.6	448.7	124.9	131.5
14-Sep-92	18:23:30	219080	13344.9	2514.2	148.9	54.8	-39.4	74.2	431.4	105.7	114.5
15-Sep-92	20:03:00	219244.2	12413.7	2457.9	129.1	39.3	-50.5	67.1	398.5	123.3	90.4
16-Sep-92	21:57:38	219348.5	12357.4	2277.7	166.5	84.2	2	72.9	413.3	157.8	108.4
17-Sep-92											
18-Sep-92											
19-Sep-92	17:45:00	219679	12045.6	2002.4	199.5	126	52.5	77.6	420.1	203.9	120.8
20-Sep-92	19:52:30	219647.1	11265.9	1950.8	168.1	95.7	23.3	70.7	385.2	171.3	109
21-Sep-92	17:32:34	219898.3	12362.9	2123.9	189.5	111.9	34.3	76	422.3	156.2	123.8
22-Sep-92	19:38:31	219881.8	8924.9	1454.1	119	59.3	-0.4	52.6	298.1	113.9	77.7
23-Sep-92											
24-Sep-92	19:19:00	220260.8	12776.9	2074.6	218.9	142.2	65.6	84.8	448.7	208.5	140.8
25-Sep-92	21:47:29	220405.3	13145.7	2010.7	245.8	171.6	97.4	88.3	468.5	205.2	155
26-Sep-92	18:10:30	220572.1	11534.3	1818.7	196.7	127.9	59.1	74.2	403.1	173.8	122.6
27-Sep-92	20:10:16	221173.6	11610.6	1802	199	129.8	60.7	75.3	406.4	175	125.9
28-Sep-92											
29-Sep-92	19:17:57	220935.3	10826.8	1887	130	54.8	-20.4	62.1	355.8	128.7	88.7
30-Sep-92	21:37:00	220958.2	11318.4	1944.4	128.3	48.8	-30.7	62.1	366.9	106.3	89.3

SAN FERNANDO OBSERVATORY

1992 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
1-Oct-92	19:33:00	221142.6	11483.2	1920.1	156.3	80.3	4.2	68.6	384.5	135.3	107.6
2-Oct-92											
3-Oct-92	17:41:00	221359.8	12586.4	2022.6	184.6	103.8	23	76.7	426.9	160.3	121.9
4-Oct-92											
5-Oct-92	17:23:40	221599.4	15039.6	2620.3	205.7	106.6	7.5	88.7	503	170.1	138.6
6-Oct-92	19:43:15	221792.4	18414	3218.3	241.8	118.5	-4.8	108	611.8	193.6	170.3
7-Oct-92	21:20:00	221810.1	14352.4	2463.2	155.1	52.4	-50.2	79.2	463.1	137.1	113.1
8-Oct-92	19:10:00	221987.1	16943	3093.5	203.4	85.7	-32.1	97.7	556.6	194.7	142.5
9-Oct-92	22:11:00	222126.2	17687.8	3153.9	249.4	134.3	19.2	105.9	594.8	200.7	169.9
10-Oct-92	17:39:30	222217	14670.1	2481.1	214.4	120.7	27.1	88	495.4	155	146.4
11-Oct-92	18:21:45	222296.6	10773.7	1818.7	147.2	76.1	5	63.5	360.4	125.1	98.3
12-Oct-92	16:10:30	222422.6	9242	1507.8	131.5	71.2	10.9	56.1	312.4	124.5	86.1
13-Oct-92											
14-Oct-92											
15-Oct-92											
16-Oct-92	22:43:00	223064.1	7761.2	1267	124.9	76.8	28.8	50.1	269.2	122.4	80.3
17-Oct-92	17:29:30	223029.3	8258	1450.2	104.1	47.6	-8.9	48.6	273.6	101.3	72.1
18-Oct-92											
19-Oct-92	17:14:00	223412.2	10579.4	1735.1	154.8	87.5	20.2	62.1	356.9	116	99.4
20-Oct-92	19:22:34	223409.9	12857.6	2235.8	179.2	94.5	9.8	78.7	433.3	166.7	123.2
21-Oct-92											
22-Oct-92	18:58:30	223793.4	13670.2	2459.4	166	71.9	-22.1	77.2	448.1	136.2	115.7
23-Oct-92											
24-Oct-92											
25-Oct-92											
26-Oct-92											
27-Oct-92											
28-Oct-92											
29-Oct-92											
30-Oct-92											
31-Oct-92	18:46:30	225588.2	15346	2791.3	164.4	54.1	-56.2	84.6	495.2	159.1	116.6
1-Nov-92	19:13:40	224893.4	15294	2795.7	177.9	71.1	-35.8	85.6	498.5	153.5	124.9
2-Nov-92											
3-Nov-92	20:11:56	225257.7	12334.9	1969.6	215.4	142.8	70.3	79.7	433.1	189.9	132
4-Nov-92											
5-Nov-92	19:53:00	225439	11242	1809.6	185.4	116.6	47.8	73.4	391.9	182.1	118.6
6-Nov-92	20:31:00	225625	11534.6	1703.2	211.1	145.9	80.6	74.7	406.8	145.5	135.5
7-Nov-92											
8-Nov-92											
9-Nov-92											
10-Nov-92	20:03:29	225999.9	8533.2	1399.8	112	54.6	-2.7	50.8	284.2	98.8	78.9
11-Nov-92	22:11:00	226160.6	10803.1	1690.8	178.2	113.8	49.5	65.2	371.2	107.1	114.7
12-Nov-92	20:11:23	226046.1	11215.8	1833.8	177.1	107.5	38	70.2	385.8	151.5	114.9
13-Nov-92	21:17:29	226820.9	14441.3	2458	224.2	132.7	41.2	92.4	498.7	248.7	138.7
14-Nov-92	18:30:00	226361.6	12984.7	2131.4	212.1	131.9	51.6	84.8	452.8	229.2	131
15-Nov-92											
16-Nov-92	18:17:30	226527	13749.7	2216.8	215.8	131.5	47.1	82.5	468.8	138.7	141.8
17-Nov-92	19:53:40	226748.7	16781	2768.2	272.3	171.2	70.2	101.8	575.5	168.8	178.5

SAN FERNANDO OBSERVATORY

1992 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
18-Nov-92											
19-Nov-92	19:45:30	226861.2	20652.7	3564.6	348.9	223.5	98.1	137.4	725.1	364.9	219.9
20-Nov-92											
21-Nov-92											
22-Nov-92	19:22:30	227086.9	16196.6	3021.2	184.6	70.4	-43.7	90.3	527	174.3	126.7
23-Nov-92											
24-Nov-92											
25-Nov-92	19:49:39	227407.3	21376.9	3309.3	448.7	335.4	222.2	156.9	788.5	443.5	276.6
26-Nov-92	18:25:00	227296.5	20133.3	3054.4	418.9	312.5	206.1	143	737.9	387	251.2
27-Nov-92	21:08:42	227593.5	20212.2	3459.9	304.8	176.8	48.9	123.5	688.7	262.5	196.8
28-Nov-92	18:19:00	227749	14936	2744	145.8	36.4	-73	78.8	474	114.6	110
29-Nov-92											
30-Nov-92	17:39:30	227702.6	12589.5	2211.3	140.1	50.6	-38.9	69.9	408.5	135.9	96.9
1-Dec-92	19:41:49	227796.1	11153.4	1878.3	168.3	96.6	24.9	70.9	383.3	191.7	104.7
2-Dec-92	20:23:30	227901.5	10387	1593.4	206.3	149.2	92.1	74	377.6	197.8	129.6
3-Dec-92											
4-Dec-92											
5-Dec-92	18:18:00	228270.8	4951.3	705.1	78.4	47.6	16.7	31.6	171	75.8	50.4
6-Dec-92											
7-Dec-92											
8-Dec-92	19:35:59	228101.9	8952.9	1332.7	155.5	102.2	49	59.6	315.2	145.9	99.7
9-Dec-92	21:37:30	228439.5	16326.9	2782.6	269.6	170.4	71.2	103.9	567.1	241.7	169.2
10-Dec-92	19:34:30	228526.5	17767.5	3192	229	108.2	-12.5	105.3	591.1	227.4	155.7
11-Dec-92											
12-Dec-92	18:32:00	228526.1	14118.9	2406.8	137	33.1	-70.7	75.2	448.4	114.5	104.7
13-Dec-92	19:12:02	228553	17442.6	3081	182	56.4	-69.3	94.2	559	148	134.2
14-Dec-92	18:14:30	228427.1	15875.9	2623.1	215.1	109.4	3.8	95.4	532.1	201.7	146
15-Dec-92											
16-Dec-92											
17-Dec-92											
18-Dec-92											
19-Dec-92	20:17:30	228814.2	11873.1	1706.1	224.9	158.8	92.7	78.6	423.2	176.9	138.9
20-Dec-92											
21-Dec-92	20:51:00	228900.8	16377	2543.7	310.4	218.1	125.9	112	587.2	285.9	192.2
22-Dec-92	20:52:30	228779.2	15302.2	2518	256	162.8	69.6	100.6	535.5	260.4	161
23-Dec-92	21:29:23	228800.1	17070.8	2919.3	239.4	127.5	15.6	102.9	575	218.2	159
24-Dec-92	21:12:00	229036.2	17917.3	3180.7	220	97.1	-25.8	102.5	588.7	179.6	156.3
25-Dec-92											
26-Dec-92											
27-Dec-92											
28-Dec-92											
29-Dec-92											
30-Dec-92											
31-Dec-92	20:29:00	228846.1	6202.3	886.3	132.6	100.1	67.6	45.9	229.9	133.7	80.5

SAN FERNANDO OBSERVATORY

1993 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
18-Feb-93											
19-Feb-93											
20-Feb-93											
21-Feb-93											
22-Feb-93											
23-Feb-93											
24-Feb-93											
25-Feb-93											
26-Feb-93											
27-Feb-93											
28-Feb-93											
1-Mar-93											
2-Mar-93											
3-Mar-93											
4-Mar-93											
5-Mar-93											
6-Mar-93											
7-Mar-93											
8-Mar-93											
9-Mar-93											
10-Mar-93											
11-Mar-93											
12-Mar-93											
13-Mar-93											
14-Mar-93											
15-Mar-93	23:09:00	223985.5	8100.9	1520.1	87.7	29.7	-28.3	44.5	261.8	87.1	60.2
16-Mar-93	20:29:18	223733.8	10170.4	1848.2	129.1	60.1	-8.9	58.1	336	114.4	85.3
17-Mar-93	20:17:30	223930.4	11411.9	1880.9	196.2	128.4	60.6	73.5	399.5	172.3	122
18-Mar-93	21:12:40	223462.5	13758.3	2289.2	237.4	154.7	72	92.2	485.5	255.4	145.9
19-Mar-93											
20-Mar-93	18:49:00	223226.6	14177.6	2276.8	255.7	173.7	91.8	94.2	501.6	218.2	162.9
21-Mar-93	18:44:30	223058.8	14261.6	2344	239.1	154.2	69.2	89.3	494	167.6	156.2
22-Mar-93	21:20:02	222956.8	11349.2	2021.5	112.8	30.1	-52.7	60.6	361.2	87.8	86.5
23-Mar-93	20:32:00	222906.2	10406.2	1896.7	96.4	18.9	-58.5	54.6	328.7	85.6	73.1
24-Mar-93											
25-Mar-93											
26-Mar-93											
27-Mar-93											
28-Mar-93											
29-Mar-93	21:43:45	221973.3	12592.5	2134.1	176.5	94.2	11.8	75.4	423.6	152.4	118.2
30-Mar-93	20:26:40	221999.9	14067.2	2335.2	212.4	123.7	35	84.7	478.3	171.5	135.9
31-Mar-93	20:42:04	221848.9	16349.9	2799.9	239	133.7	28.3	100.3	555	216.6	158

SAN FERNANDO OBSERVATORY

1993 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
19-May-93											
20-May-93											
21-May-93											
22-May-93	15:56:30	216115.8	4692.3	647.3	94	68.6	43.2	32.8	170.2	81.8	58.7
23-May-93											
24-May-93	20:24:26	215842.2	5817.1	867.9	86.4	49.2	12	35.7	198	79	55.9
25-May-93											
26-May-93	18:02:33	215809.5	7829.8	1153	121.5	73.1	24.7	46.8	266.8	86.8	77.5
27-May-93	18:09:30	215691.3	9263.2	1438.5	155.5	99.7	44	59.9	322.7	131.7	101.4
28-May-93	23:58:23	215765.6	14320.4	2372.6	223.8	134.9	46	88.1	490.5	181	144.4
29-May-93	20:26:36	215449.2	14525.8	2415.3	216.4	123.7	31.1	89.9	494.4	183.7	146.7
30-May-93	18:47:40	215469.9	15179.9	2723.1	183	78	-26.9	86.8	498	160.1	129.3
31-May-93											
1-Jun-93											
2-Jun-93											
3-Jun-93	18:39:00	215240.3	19132.6	3313.1	290	168.3	46.5	120.1	655.3	283.4	187.8
4-Jun-93											
5-Jun-93											
6-Jun-93											
7-Jun-93											
8-Jun-93	17:59:32	215145.4	9242.7	1496.7	158.5	102.9	47.3	61.6	325.3	162.8	99.2
9-Jun-93	23:15:56	215027.8	8311.1	1183.3	194.4	154.7	114.9	62.3	313.7	173.4	115.4
10-Jun-93	17:18:35	214923	6222.7	875.8	130.7	98.1	65.6	44.3	228.4	117.2	79.1
11-Jun-93	17:51:49	214908.5	3602.3	524.5	59.1	37.2	15.4	22.5	124.5	47	37.4
12-Jun-93	21:00:00	214653.1	3111.1	468	39.5	18.6	-2.3	17.1	102.1	26.5	26.4
13-Jun-93	17:28:00	214685.7	3180.8	468.5	48.3	28.2	8	19.8	108.7	41.9	32.2
14-Jun-93	21:43:12	214620.6	3039.7	472	41.8	21.5	1.3	18.6	102.7	49.4	26.2
15-Jun-93	20:05:30	214709.8	3596.6	537.5	61	39.5	18.1	22.6	125.3	52.9	36.6
16-Jun-93	18:25:20	214541.7	3906.6	612.6	56.4	31.1	5.8	24	132.3	48.8	38.6
17-Jun-93	18:54:30	214527.2	2554.9	411.4	27	8.6	-9.7	14	82	20	20.8
18-Jun-93	18:22:34	214545	3578	566.5	43.2	18.5	-6.1	20.3	117.2	34.7	30.8
19-Jun-93	20:39:26	214411.5	4964.9	714.5	83.9	54.4	24.9	31.2	172.5	64.3	53.2
20-Jun-93	19:51:30	214379.3	5000.6	741.7	73.2	40.9	8.6	31.1	170.2	70.5	48.7
21-Jun-93	21:21:30	214388	5606.5	874.4	72.2	34.1	-4	33.1	186.5	73.1	48.3
22-Jun-93	20:51:30	214416.8	6877.1	948.8	109.2	67.1	25	41.8	235.4	75.8	71.1
23-Jun-93	17:55:30	214313.4	5807.5	806.6	86.7	49.9	13.1	35.8	197.1	61.3	61.8
24-Jun-93	18:11:00	214518.4	9514.2	1445.8	137.6	76.3	15.1	57.6	321.3	108.6	94
25-Jun-93	17:55:18	214189	10161.6	1636.4	129.1	59.8	-9.5	59.7	336.9	122.8	89
26-Jun-93	20:42:15	214388.9	13565.7	2108.5	227.7	146.7	65.7	84.7	470.7	180.2	141.3
27-Jun-93	18:56:30	214303.1	16157	2507.1	287.8	194.3	100.8	105	568.4	225.8	183
28-Jun-93	18:36:53	214489.8	16636.3	2789.1	272.9	171.1	69.3	107.9	578.4	250.4	178.5
29-Jun-93	21:38:30	214086.2	15605.6	2748.4	195.3	88.2	-18.9	91.1	516.8	202.2	129.7
30-Jun-93	20:52:10	214206.9	15056.2	2888.5	144.8	33.6	-77.7	80.2	478.6	141	105.9

SAN FERNANDO OBSERVATORY
1993 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemisphere (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
1-Jul-93											
2-Jul-93	18:47:45	214561.6	13450.3	2607.2	113	11.3	-90.4	67.7	418.2	74.5	92.7
3-Jul-93	21:07:05	214224.4	13721.6	2591.2	152.7	55.3	-42.1	76.3	444.7	137.6	108.8
4-Jul-93											
5-Jul-93											
6-Jul-93	21:28:00	214246.3	6917.1	954.4	154	119.9	85.8	49.6	256.4	118.6	93.9
7-Jul-93	18:24:15	214450.5	4837.6	700.7	90.2	63.2	36.2	31.2	171.2	63.8	55.9
8-Jul-93	22:07:33	214403.2	4059.9	676.3	49.4	21.5	-6.5	22.9	133.2	42.8	33.6
9-Jul-93	18:22:30	214394.5	4915	803.2	62.5	29.1	-4.2	28.4	162.7	56.6	42.1
10-Jul-93	21:15:30	214307	5217.4	880.2	61.6	25.1	-11.4	30.1	171.1	59.6	43.9
11-Jul-93	17:08:00	214424.9	4674.1	752.2	56.7	24.3	-8.1	27.1	153.7	52.7	40.3
12-Jul-93	19:21:59	214571.3	5422.1	934.1	58.9	20.7	-17.6	28.7	173.6	32.7	43.8
13-Jul-93	22:10:30	214406.4	4771.7	826.4	46.5	11.6	-23.4	25.3	151.2	32.2	36.8
14-Jul-93	19:17:37	214396.9	4974.9	879.9	43.3	5.8	-31.6	25.6	155.6	31.5	35.4
15-Jul-93											
16-Jul-93	18:24:42	214584.5	4906.3	806	69.5	37.5	5.5	29.6	165.4	61.1	46.5
17-Jul-93											
18-Jul-93											
19-Jul-93	19:26:30	214529.2	6616.8	982.8	113	73.3	33.5	43.7	232.3	109.9	71.6
20-Jul-93	22:29:00	214853.6	8024.4	1213.3	128.4	78.9	29.4	51.1	276.9	107.3	86.1
21-Jul-93											
22-Jul-93											
23-Jul-93	23:43:12	214603.7	11802.5	1999.6	164.7	87.3	9.9	70.7	396.8	144	110.4
24-Jul-93											
25-Jul-93											
26-Jul-93	23:32:17	214978.8	14281.9	2505.9	189.7	93.8	-2.1	84.6	477.3	190.1	123.7
27-Jul-93	21:48:00	214819.9	13702.6	2391.2	159.4	63.6	-32.1	76.8	446.6	136	112.5
28-Jul-93	23:11:10	215060.1	12964.2	2365.3	137.2	44.1	-48.9	70.8	416.5	110.4	102.9
29-Jul-93	20:35:00	214842.8	11284	2018.7	103.3	19.3	-64.8	58.5	355.4	85.5	78.6
30-Jul-93	21:25:30	214958.2	9777.4	1717.9	109.9	40.5	-28.9	55	318.1	110.7	76.4
31-Jul-93	20:34:19	214910.3	8974.1	1463.7	140	83.4	26.9	57.6	309.6	139.9	91.5
1-Aug-93	17:00:30	215259.3	8310.1	1302.8	148	99.6	51.2	55	293.2	126.5	94.5
2-Aug-93	19:05:30	215355.6	5278.8	753.9	106.3	78.2	50.1	35.9	190.7	81.1	65.6
3-Aug-93											
4-Aug-93	20:31:40	215166.3	7410.4	1092.1	179.1	144.5	109.9	57.7	283	164.4	108.7
5-Aug-93	20:51:30	215220.5	8166	1386.2	147.7	99.7	51.7	56.5	291.7	163.8	90.5
6-Aug-93	16:56:30	215381.1	8154.3	1537.5	100.2	43.8	-12.6	47.3	269.6	111.3	64.6
7-Aug-93	20:52:30	215415	7924	1676.1	44.2	-19.8	-83.9	36.2	236.4	20.1	44.4
8-Aug-93											
9-Aug-93											
10-Aug-93	19:28:30	215520.4	9536.6	1786.2	107.3	39.6	-28.1	53.8	310.4	108.4	74.9
11-Aug-93	17:19:52	215869.2	9317.9	1570.2	148.3	90.2	32.2	59.7	322.6	150.8	93.4
12-Aug-93	19:25:00	215736.4	8133.8	1211.5	154	108.2	62.4	55.9	291.4	135	98.5
13-Aug-93	22:52:24	215904.6	7181	1089.1	133	92.4	51.8	47.2	254.7	104.9	82.6
14-Aug-93											
15-Aug-93											
16-Aug-93	17:44:00	216135.3	4247.5	753.6	37.9	6.2	-25.5	22	133.1	23.2	32.1
17-Aug-93	20:33:30	216200.6	4826.9	825.2	46.2	10.7	-24.9	25.6	152.9	36.2	36.1

SAN FERNANDO OBSERVATORY
1993 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
18-Aug-93	18:33:30	216218.8	5742.5	838.6	90.3	55	19.7	34.3	196.4	71	54.9
19-Aug-93	19:00:30	216313	6564.5	953.1	118	79.7	41.4	44.3	232.9	111.6	74.5
20-Aug-93	21:20:30	216237.9	6290.5	911.9	113.7	76.9	40.2	42.9	223.9	115.3	70.8
21-Aug-93	22:06:00	216609	7235.1	1056.7	120.2	76.2	32.2	46.6	252.2	116.5	74.3
22-Aug-93	17:11:30	216652	8114.6	1265.8	110.8	56.9	3.1	48.6	272.3	107.2	72.9
23-Aug-93	19:00:00	216698.2	8676.7	1431.3	94.3	32.2	-29.9	48.2	280.5	88.1	68
24-Aug-93	21:01:45	216569.6	8116	1386.3	67.1	5.3	-56.4	40.8	252.2	50	54
25-Aug-93	21:58:12	216772.5	7992.7	1330.9	79.1	20.8	-37.4	42	253.9	59.9	58.9
26-Aug-93	17:38:30	217134.3	7908.5	1320.9	85.9	29.4	-27	43.8	255.1	69.3	64.9
27-Aug-93	20:37:05	217284.9	7128.2	1141.1	96.2	48.6	1.1	42.7	239	94.7	63.9
28-Aug-93											
29-Aug-93	19:10:40	217366.5	5456.4	875.9	86.7	52.7	18.7	35.3	188.6	80.4	58.1
30-Aug-93	20:24:30	217281.9	4467.4	682.6	86.4	62.3	38.2	29	158.7	47.3	56
31-Aug-93	18:24:40	217568.9	4573.9	691.2	68.3	39.4	10.5	27.6	155	48.3	46.6
1-Sep-93											
2-Sep-93	19:14:00	217712.6	4151.7	649.7	61.4	34.6	7.8	25.8	141.8	65.2	38.5
3-Sep-93	19:40:30	217582.4	4765.7	739.3	61.2	29	-3.3	27.9	157.9	50.8	43.6
4-Sep-93											
5-Sep-93	16:51:42	218086.2	4962.7	863.3	28.1	-11.9	-51.8	22.7	147.9	6.1	29.9
6-Sep-93	22:27:39	218284.4	3880	723.1	21.2	-10.2	-41.6	17.7	115.4	5.1	23
7-Sep-93	19:04:00	218189.3	2983.9	506.8	27.1	4.8	-17.4	15.7	93.9	20.6	22
8-Sep-93	19:04:00	218266.6	3336.1	529.6	46.9	25.1	3.2	20.1	112.3	41.2	31.6
9-Sep-93	18:12:49	218531.1	3526.9	501.7	61.2	40.2	19.1	23.5	124.2	58.2	39.2
10-Sep-93											
11-Sep-93	21:05:15	218786.2	3539.9	512.3	42.7	18.3	-6.1	19.8	115.8	33.3	29.9
12-Sep-93											
13-Sep-93											
14-Sep-93	22:48:31	219114.3	2302.2	371.2	18	0.3	-17.4	11.4	71	12.1	15.1
15-Sep-93	21:31:30	218978.1	3591.2	500.9	56.1	34	11.8	21.3	122.5	42.5	34.4
16-Sep-93											
17-Sep-93											
18-Sep-93	19:35:59	219357.7	5306.8	836.9	72.3	36.8	1.2	32.3	178.9	83.3	45.8
19-Sep-93											
20-Sep-93											
21-Sep-93	20:46:03	219865	5349.1	929.7	35.3	-7	-49.3	25.4	162.1	20.6	32.5
22-Sep-93	20:44:45	219670.3	4222.3	698.8	32.8	0.3	-32.3	21	130.5	26.2	27.1
23-Sep-93	19:19:53	220031.8	5409.7	914.7	58.2	19.4	-19.5	30	174.9	59.3	40.8
24-Sep-93	18:26:20	220328.8	4281	676.2	50.6	20.7	-9.1	24.5	140.1	44.5	36.6
25-Sep-93	18:58:09	220335.8	4305.4	723.9	58.3	29.7	1.2	25.6	143.9	49.2	40.1
26-Sep-93	16:56:00	220422.3	3654.3	599.2	48.6	24.1	-0.3	21.5	122	46.3	32
27-Sep-93	21:53:00	220327.1	4874.6	790.9	81.9	52.3	22.6	32.3	171	87.5	51.1
28-Sep-93	19:58:07	220502.5	6123.8	852.1	146	117.5	88.9	45.6	231.6	120.9	86.5
29-Sep-93	20:50:32	220787.2	7995.8	1185.9	181.2	141.9	102.6	59.1	299.2	159.5	109.1
30-Sep-93	18:28:16	221031.8	7318.8	1284.1	115.1	69	22.8	47.4	253.4	125.5	72.7

SAN FERNANDO OBSERVATORY
1993 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
1-Oct-93	18:05:20	221054.5	5899.8	1154.4	56.4	12.7	-31	31.3	187.5	58.1	40
2-Oct-93	18:58:19	221230	7394.3	1499.5	60.6	4.8	-51	36.3	228.1	20.4	53.5
3-Oct-93	16:52:40	221330.5	8399.1	1636.5	83	21.8	-39.4	45.3	266.7	49.6	70.3
4-Oct-93											
5-Oct-93	19:46:09	221578.3	8851.3	1752.2	102.2	40.2	-21.9	49.2	288.5	99	67.7
6-Oct-93	19:47:17	221823.7	7869.2	1483.4	106.1	53.2	0.4	47.7	264.6	119.5	68
7-Oct-93	18:43:35	221969.3	7232.6	1259.3	132	90	48.1	49.6	258	130.9	83.2
8-Oct-93											
9-Oct-93											
10-Oct-93											
11-Oct-93											
12-Oct-93	20:23:23	222433.1	5916.2	1055.5	83.6	44.9	6.2	35.6	199.8	82.4	53.1
13-Oct-93											
14-Oct-93	19:14:38	222695.4	5327.1	1001.5	58.4	20.3	-17.8	29.6	172.8	61.7	39.7
15-Oct-93											
16-Oct-93											
17-Oct-93											
18-Oct-93	17:32:30	223171.7	6198.2	899.4	113.7	78.1	42.5	42.1	220.5	99.7	73.5
19-Oct-93	19:42:55	223386.1	6070.1	942.2	98.5	61.3	24	38.6	210.2	89.6	62.5
20-Oct-93	19:07:00	223586.2	6417.6	1025.9	84.1	41.3	-1.5	36.4	212.5	66.4	55
21-Oct-93											
22-Oct-93	20:26:30	223835.8	6165.3	1081.2	67.5	23.6	-20.3	34	199.3	60.9	48.1
23-Oct-93	18:43:40	223849.4	5056.5	851.9	69.4	35.7	2	30.8	170.5	76.8	44.3
24-Oct-93											
25-Oct-93	17:40:40	223994.8	5634.6	733.4	137.2	111.8	86.5	41.4	213.2	99	81.6
26-Oct-93	19:58:49	224290	5282.2	777.6	108.5	80.4	52.3	37.3	192.9	98	66
27-Oct-93	19:40:30	224467.6	5478.1	902.8	89.2	55.2	21.2	35.9	191.1	98.5	55.3
28-Oct-93											
29-Oct-93	18:03:00	224686.2	5563.9	952	65	26.7	-11.6	30.2	179.8	30	49.5
30-Oct-93	18:14:33	224704.1	6372.8	1125.8	66.9	21.3	-24.4	34.7	203.7	37.5	55.2
31-Oct-93											
1-Nov-93	19:08:40	225041.2	7799.6	1266.1	112.3	61.4	10.5	48.2	265.1	118.8	72
2-Nov-93	21:09:35	225120.3	7046.8	1154.4	102.7	56.7	10.8	44.2	240.4	114.4	65.3
3-Nov-93	20:20:19	225340.8	6194.3	1034.3	81.2	39.5	-2.2	36.4	206.3	76.5	54.1
4-Nov-93	19:49:18	225390.1	5544.1	965.4	59.3	19.5	-20.2	30.1	178.5	53.2	41.8
5-Nov-93	18:42:47	225425.5	5488.2	883.4	75.4	39.5	3.6	31.7	183.2	56.9	50
6-Nov-93	19:16:54	225550.2	5736.2	845.9	110.8	78.9	47.1	39.6	206.4	96.4	70.2
7-Nov-93	17:18:35	225517.1	5452.5	811.5	104.8	74.1	43.3	38.3	197	109.5	63.6
8-Nov-93	19:25:30	225747.3	5218.8	818.8	82.8	49.9	17.1	34	181.3	96.1	50.8
9-Nov-93	20:49:37	226000.4	5325.9	846.6	76.4	41.9	7.4	32.1	179.9	66.2	50.5
10-Nov-93											
11-Nov-93											
12-Nov-93	19:16:30	226266.2	2252.2	340.6	22.6	6.2	-10.3	12.2	71.9	20.3	16.9
13-Nov-93	19:11:59	226202.4	3178.9	422.5	58.2	40.2	22.2	20.4	112.2	44.4	35.5
14-Nov-93											
15-Nov-93	20:36:48	226521.3	4709.3	718	76.2	47	17.7	30.9	164	82.1	48.2
16-Nov-93	20:38:03	226876.5	5663.9	970.9	57.6	16.3	-25	30.6	181.5	58.2	40.3
17-Nov-93	20:14:42	226849.4	4589.1	876.8	26.9	-10	-46.8	21.2	137.4	11.9	26.7

SAN FERNANDO OBSERVATORY

1993 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
18-Nov-93	19:32:47	226885.5	3862.2	708.5	16.1	-16	-48.1	16.7	112.4	-4.4	21.5
19-Nov-93	22:00:41	226951.8	3631.3	668	28	0.2	-27.7	17.7	111.6	14.6	24.1
20-Nov-93											
21-Nov-93											
22-Nov-93											
23-Nov-93	20:50:44	227358.2	6270.8	956.1	124.3	90.7	57.1	42.1	225.1	82.9	79.5
24-Nov-93	19:20:08	227279	4586.4	779.2	43.7	9.8	-24.1	24.6	145.4	36.6	34.6
25-Nov-93	21:52:02	227847.3	5698.7	1052.8	46	2.4	-41.2	28.4	176.8	38.5	36
26-Nov-93	19:29:15	227671	4180.6	694.8	39.2	8.2	-22.8	21.9	132.1	33.8	29.3
27-Nov-93											
28-Nov-93											
29-Nov-93											
30-Nov-93	21:18:40	227706.5	5878	1032	51.8	7.6	-36.6	30.4	184.4	43.3	40.8
1-Dec-93	20:41:30	228004.2	8789.6	1332.2	140.6	87.3	33.9	52.5	300.6	93.9	88.4
2-Dec-93	20:00:48	228127.9	9979.3	1616.3	174.5	115.3	56	67	352.2	168.1	111.8
3-Dec-93	20:01:50	228182.2	11279.2	1820.4	218	154.6	91.3	79.5	407.9	221.2	134.6
4-Dec-93	19:27:44	228155.6	11343.9	1869.5	201.7	135.1	68.5	75.2	401.4	197.8	122.3
5-Dec-93	18:05:30	228075.6	8841.5	1537.4	117	57.5	-2.1	52.7	295.7	122	76.4
6-Dec-93	21:57:35	228389.4	8411.7	1609	82.7	21.2	-40.2	44.1	267.1	66.6	60.4
7-Dec-93	20:27:40	228602.9	8660.8	1694.6	67.5	0.9	-65.7	42.7	267.4	52.4	54.2
8-Dec-93	20:11:26	228465.6	9294.7	1779.9	86.2	16.9	-52.4	49	294.1	84.7	63.6
9-Dec-93	19:53:33	228495.8	8803.5	1567	127.4	69.9	12.4	55	299.8	138.8	81.8
10-Dec-93	19:55:38	228549.8	8692.6	1367.2	190	145.6	101.2	64	323.2	180.7	114.2
11-Dec-93											
12-Dec-93	17:52:00	228532.2	4806.9	636.4	121.9	101	80.1	36.6	184.6	96.7	71.3
13-Dec-93	20:36:05	228642.5	3673	562.8	41.3	15.5	-10.4	19.9	118.9	35.7	27.7
14-Dec-93											
15-Dec-93	19:20:30	228650.4	2433.6	371.4	18.7	0.3	-18.1	11.2	74	-1	16.9
16-Dec-93											
17-Dec-93	20:23:06	228869.5	3933.4	621.3	55.2	29.2	3.1	24.4	133.4	63.5	35.1
18-Dec-93											
19-Dec-93											
20-Dec-93	19:57:30	228849.8	2154.2	312.7	20.4	4.6	-11.1	11.2	67.6	6.2	18.2
21-Dec-93	21:00:00	228935.7	4280.2	581.3	81.2	57.8	34.5	27.3	151.3	46.5	51.3
22-Dec-93	19:48:30	228914.9	5539.2	821.9	108.8	78.2	47.6	39.1	200.6	101.3	68.7
23-Dec-93											
24-Dec-93											
25-Dec-93											
26-Dec-93											
27-Dec-93	19:42:30	229068	9326.9	1750.7	60.1	-13.9	-87.9	44	282	35.5	55.4
28-Dec-93	18:19:55	228944.9	8090.3	1415	83.6	24.8	-34	44	259.9	85.3	58.2
29-Dec-93	19:28:30	228965.9	7680.3	1123.2	141.1	96.7	52.3	52.4	274.2	141.4	86.8
30-Dec-93											
31-Dec-93	18:26:00	228872.5	9913.7	1320.1	244.4	199.5	154.6	75.6	378.9	209.5	143.6

SAN FERNANDO OBSERVATORY

1994 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
18-Feb-94											
19-Feb-94	20:07:52	225678.5	9039.8	1680	65	-5.6	-76.2	43.8	276.9	52.1	53.7
20-Feb-94											
21-Feb-94	19:58:00	226377.2	9939.5	1511.5	187.7	131.7	75.7	67.6	355.8	170	116
22-Feb-94											
23-Feb-94	19:44:30	226200.7	9073.8	1327.7	170.1	118.3	66.5	62.7	325.6	171.6	104.5
24-Feb-94	20:23:30	226148.7	8753.2	1353.1	130.4	74.9	19.4	52.5	296.8	102.4	84.9
25-Feb-94	22:12:46	226263.2	10293.3	1811.6	88	10.7	-66.5	51.3	319.7	43.1	73.4
26-Feb-94											
27-Feb-94											
28-Feb-94	22:42:42	225843.8	9519.1	1561.8	125.4	61.1	-3.3	56.9	318.4	135.1	81.8
1-Mar-94	21:23:01	225721.9	9345.7	1537.4	130.4	68.6	6.7	57.6	316	138.1	86.1
2-Mar-94	22:49:30	225522.2	9244.9	1586.2	126.6	65.6	4.7	55.1	309.6	105.9	87
3-Mar-94	20:10:49	225513.5	8837	1575.2	106.3	45.4	-15.5	49.8	288.9	78.6	77.1
4-Mar-94											
5-Mar-94											
6-Mar-94											
7-Mar-94	22:57:30	224838.5	5891.3	1060.2	80.3	41.4	2.5	35	197	64.9	55.7
8-Mar-94											
9-Mar-94											
10-Mar-94											
11-Mar-94	21:37:10	224192.2	3395.5	434	88.8	74.7	60.7	25.6	130.8	61.8	51.8
12-Mar-94	20:58:04	224326.2	4042.4	492.6	112.4	96.9	81.4	32.1	159.1	81.6	66.3
13-Mar-94	20:44:30	224322.5	4731.3	611.4	121.4	100.9	80.4	36.9	182.9	103.1	71.3
14-Mar-94	22:20:30	224233.5	6553.7	1052.8	121.7	84	46.3	45	234.7	125.2	73.7
15-Mar-94											
16-Mar-94	22:51:20	224110.8	7683.5	1376.8	84	29.3	-25.5	42	248.3	78.1	57.9
17-Mar-94											
18-Mar-94											
19-Mar-94											
20-Mar-94											
21-Mar-94	20:23:34	223085	4388.3	647.3	77.8	51.9	26	29.6	155.5	78.5	48.7
22-Mar-94											
23-Mar-94											
24-Mar-94											
25-Mar-94											
26-Mar-94											
27-Mar-94	17:31:50	222372	7361	1225.9	80.9	28.2	-24.4	41.2	238.9	86.2	55.6
28-Mar-94	21:42:26	222335.7	9241.7	1626.7	84.7	15.7	-53.3	48.5	291.7	77.8	64.3
29-Mar-94											
30-Mar-94	22:09:46	222175.3	7205.9	1289.2	71.1	18.6	-33.9	37.9	228.7	49.7	54.6
31-Mar-94	19:22:43	221862.5	6094.7	1046.8	65.5	21.9	-21.8	33.3	196.5	61	46.1

SAN FERNANDO OBSERVATORY

1994 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
19-May-94											
20-May-94	20:26:32	216281.2	7120.8	1203.8	91.3	43	-5.4	41.3	236.3	90.9	58.9
21-May-94	19:10:25	216238.8	6551.5	1060.6	89.9	46.4	2.9	40	220.3	85.9	61.9
22-May-94	16:48:45	216301.1	5468.5	847.6	80.9	46.3	11.6	33.3	184.9	51.4	58.4
23-May-94											
24-May-94											
25-May-94											
26-May-94											
27-May-94	20:04:55	215865.6	487.7	56.6	10.9	8.5	6.2	3.4	18	7.3	6.6
28-May-94	18:57:29	215630.7	200.5	27.6	1.9	0.5	-1	1.1	6.4	1.9	1.4
29-May-94											
30-May-94											
31-May-94											
1-Jun-94	18:14:30	215463	286.1	35.3	4.7	3	1.2	1.9	10	5	3
2-Jun-94											
3-Jun-94											
4-Jun-94	21:06:08	215323.1	598	80.9	5.4	0.9	-3.6	3.1	18.8	4.4	4.2
5-Jun-94											
6-Jun-94											
7-Jun-94	20:06:30	215092.2	1247	160.2	21.9	14.7	7.6	7.6	43.2	10.9	14.1
8-Jun-94	20:31:00	215028.4	2497	324.7	53.1	40.6	28.2	16	90.4	32.4	29.8
9-Jun-94	19:38:50	214859.4	4914.4	699.3	115.1	91.6	68.2	37	185.4	98	70.3
10-Jun-94	19:17:30	214811.3	6208.7	1023.1	114.8	79	43.1	43.4	222.4	115.1	73.8
11-Jun-94	20:22:13	214791.5	7259.7	1284.3	92.2	42.9	-6.5	41.7	240.2	85.5	60.6
12-Jun-94											
13-Jun-94	20:46:55	214702.7	7817.9	1458.9	67.6	9.4	-48.8	38.4	242.2	20.7	57.5
14-Jun-94											
15-Jun-94											
16-Jun-94	19:20:23	214670.3	6263.4	999.4	117.3	81.6	45.9	42.4	224.2	116.4	69.4
17-Jun-94	20:05:45	214518.1	4819	743	88.5	60.8	33.1	32.9	171.6	78.7	57.6
18-Jun-94	20:53:14	214586.6	3821.7	603.1	63.3	40.5	17.7	23.5	131.8	41.8	41.2
19-Jun-94	16:45:30	214646.6	3422	591.1	34.7	9.8	-15	18.4	109.2	27.8	26.1
20-Jun-94	18:36:30	214485.2	3044.1	517.7	33.1	11.2	-10.6	17	98.7	37.2	22.2
21-Jun-94	18:23:30	214468.3	2910.3	489.5	34.2	13.8	-6.6	16.7	95.5	36.7	23.3
22-Jun-94	18:53:30	214235.6	2389.6	376.5	32.8	17	1.3	14.3	80	25.5	23.1
23-Jun-94	17:55:30	214328.3	2700.7	450	33.9	15.7	-2.5	15	88.7	24.3	23
24-Jun-94	18:27:30	214301.1	2089.8	349.7	28.3	14.3	0.3	12.7	70.3	30.3	18.7
25-Jun-94	19:58:56	214266.1	2208	330.9	40.4	27.6	14.8	15	78.7	40	25
26-Jun-94	16:31:30	214433.3	2220.3	302.2	45.9	34.2	22.5	15.4	80.9	39.2	27.4
27-Jun-94	19:00:45	214250.8	1035.5	139.4	20.6	14.9	9.3	7.2	37.5	18.9	12.5
28-Jun-94	20:02:30	214284.1	1853.2	223.5	52.2	45.4	38.5	14.3	72.8	33.9	30.3
29-Jun-94	19:57:31	214164.4	3999.5	574	90.4	70.5	50.7	30	149.9	81.8	55.7
30-Jun-94	22:06:30	214412.9	4125.9	703.1	67.1	41.4	15.6	27.3	144.3	80.5	40.5

SAN FERNANDO OBSERVATORY

1994 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
18-Aug-94	17:46:00	216179.8	3934	605.7	63.2	39.2	15.2	24.1	135	44	41.4
19-Aug-94	18:51:30	216210.2	2876.2	494.6	22.9	0.9	-21.1	14.2	89	17.8	18.1
20-Aug-94	20:51:09	216169	2623.9	464.8	23.3	3.6	-16.1	13.5	82.3	19.3	18
21-Aug-94	16:33:30	216471	2148.1	354	26.1	11.3	-3.6	12.3	70.7	25.5	17.4
22-Aug-94	21:05:01	216624.6	1986.2	294.2	33.8	21.7	9.6	13.3	70	38.5	20.4
23-Aug-94	18:17:30	216630.8	2103.8	294.8	40.2	28.3	16.3	15	76.1	43.1	25
24-Aug-94	20:09:54	216706.6	2176.2	301.4	37.1	24.1	11.1	14.1	76	30.5	24.1
25-Aug-94	17:00:30	216826.3	1332.9	209.4	11.9	1.9	-8	6.7	41.7	7.8	9.1
26-Aug-94	18:12:00	216915.4	1796.3	295.9	11.6	-2.6	-16.8	8.5	54.3	5.5	11
27-Aug-94											
28-Aug-94	16:17:52	217181.4	1781.1	273.4	18.2	5.3	-7.7	9.7	57.1	18	13.1
29-Aug-94	19:59:33	217071.4	1469.2	224.4	17.6	7.4	-2.9	8.5	48.3	18.5	11.9
30-Aug-94	18:44:30	217300.1	1708.4	248	23.7	12.5	1.3	10.2	57.3	17.9	16.7
31-Aug-94											
1-Sep-94	18:02:40	217616.9	4162.4	597.5	79.8	56.5	33.2	28.9	149.6	70.8	51
2-Sep-94	19:54:00	217564.8	4890.9	838.1	73	41.6	10.1	31	167.5	76.2	47.9
3-Sep-94	19:44:38	217623.9	4682.8	869.7	47.6	13.5	-20.5	25.2	149.9	45.6	33.6
4-Sep-94	16:56:00	217870.8	5970.7	1055.5	65.8	24	-17.7	30.9	191	30.4	47.8
5-Sep-94	19:54:02	217921	7577.6	1436.7	83.7	30.1	-23.5	41.9	244.4	56.5	64.9
6-Sep-94	17:11:30	218023.8	8503	1614.2	94.4	33.8	-26.7	47.8	276	92.1	67.3
7-Sep-94	19:48:30	218143.9	8252.7	1569.1	91.8	32.9	-26	46.3	268.5	101.6	61.6
8-Sep-94	19:59:30	218246.7	8118.5	1473.6	99.1	43	-13.2	47.2	267.7	98.8	68.3
9-Sep-94											
10-Sep-94	21:09:04	218400	4575.8	717.3	74.1	46.4	18.7	27.8	157.3	55.7	45.8
11-Sep-94	17:27:31	218662.7	3045.9	456.3	44.8	25.3	5.7	18.3	103.5	44	27
12-Sep-94											
13-Sep-94	17:13:40	218730.6	1732.1	241.9	27	16.1	5.3	11	59.5	23.1	18.4
14-Sep-94	21:49:30	218918.3	1536.7	222.8	16.8	6	-4.8	8.1	49.3	11.1	11.7
15-Sep-94	20:18:00	219123.6	2054.7	305	16.1	0.3	-15.5	10.3	63.6	13.2	13.2
16-Sep-94											
17-Sep-94											
18-Sep-94											
19-Sep-94	21:52:29	219652.4	1233.9	198.3	10.8	1.6	-7.7	6.4	38.7	8.9	8.6
20-Sep-94	21:12:00	219597.3	1292.9	204.4	11.4	1.7	-8	6.7	40.6	10.8	8.6
21-Sep-94	19:21:10	219815.8	1240.6	191.3	12.6	3.7	-5.3	6.6	39.6	9.5	9.4
22-Sep-94											
23-Sep-94											
24-Sep-94											
25-Sep-94	16:47:00	220128.3	1680.5	281.1	20.6	9	-2.7	9.7	55.6	24.8	12.7
26-Sep-94	21:32:39	220375.6	3104.6	478.7	49.5	30.1	10.7	20.3	107.7	51.4	32.2
27-Sep-94	21:30:00	220454.7	2950.9	371.1	67.9	53.8	39.7	21.3	110.2	50.7	41.1
28-Sep-94											
29-Sep-94	20:13:00	220710.3	1990.1	291.3	29.8	17	4.3	12.7	68.2	31.4	19.5
30-Sep-94	19:45:59	220882.7	1955.9	296.1	22.2	8.4	-5.4	10.8	63.6	21	15

SAN FERNANDO OBSERVATORY

1994 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
1-Oct-94											
2-Oct-94											
3-Oct-94											
4-Oct-94											
5-Oct-94											
6-Oct-94	19:26:00	221805.4	3024.7	448.4	46.9	28.1	9.3	18.8	103.4	34.4	32.2
7-Oct-94	19:12:00	221760.1	4234	648.9	74.1	49.1	24.1	27.8	149.1	69.5	45.7
8-Oct-94	19:22:29	221706.6	4134.3	689.9	70.2	45	19.8	27.8	145.7	80.6	43
9-Oct-94	16:54:00	221884.4	4028.9	656.8	63.3	38.3	13.2	25.4	138.6	55.2	41.6
10-Oct-94	19:38:30	222088.7	4458	696.6	74.3	48.1	21.9	26.6	152.8	33.9	49.3
11-Oct-94	19:15:00	222144.6	3671.7	697.2	44	18.7	-6.7	21.1	120	28.9	34.5
12-Oct-94	19:23:46	222390	4164.8	774.5	50.5	21.8	-6.8	23.4	136.5	43.3	34.2
13-Oct-94	19:50:00	222321.2	5937.1	985.8	96.1	59.8	23.4	37.4	205.1	81.5	61.6
14-Oct-94											
15-Oct-94	19:49:39	222868.1	5953.4	1018.1	74	33.3	-7.4	34.4	196.1	61.4	52.8
16-Oct-94	16:47:30	222741.5	4992.2	931	36.6	-2.1	-40.8	24.1	152.8	22.3	31.4
17-Oct-94	19:21:30	222868.9	5934.3	1190.7	33.6	-14.3	-62.2	27.3	177.1	11.9	35.1
18-Oct-94	19:35:30	223077.9	5667	1155.2	43.6	0	-43.7	28.4	174.4	23	40.3
19-Oct-94	19:27:00	223211	6371.8	1176.6	90.3	49.1	7.9	37.5	213.8	65.1	61.1
20-Oct-94	19:26:00	223306.9	6228.5	1049.2	117.3	81.9	46.5	42.7	223.4	115.5	71.3
21-Oct-94	19:20:00	223420.9	5682.5	934.5	109.1	76.9	44.6	40.5	205.9	121.5	66.4
22-Oct-94											
23-Oct-94											
24-Oct-94	19:42:00	223864.4	3193.7	597.9	22.4	-2.4	-27.1	15	96.7	3.1	21.6
25-Oct-94	19:26:00	223974.6	3773.7	658.1	47.7	22.1	-3.5	21.6	124.5	38.9	32.7
26-Oct-94	20:11:30	224167	5634.5	875.1	118.1	88.5	59	39.6	206.6	107.7	69.2
27-Oct-94	19:18:30	224236.5	7430.2	1159.3	154.2	114.6	75.1	53.5	272.8	150.8	92.8
28-Oct-94	19:18:30	224239.4	8333.3	1388.7	148.8	99.9	51	56.2	295.4	144.8	93.5
29-Oct-94											
30-Oct-94											
31-Oct-94	20:33:01	224688.7	8537.7	1622.2	70.9	6.3	-58.4	42.9	264.9	40.9	60.2
1-Nov-94	19:57:00	224815.9	9042.2	1673.2	102.1	38.2	-25.7	50.9	293.9	91.5	74.1
2-Nov-94											
3-Nov-94	20:36:30	224963.3	5936.8	1003.3	90.5	52.6	14.6	37.9	204.5	102.9	56.4
4-Nov-94											
5-Nov-94	22:52:18	225569.4	3353.1	484.3	70.2	53.2	36.2	21.8	121.2	43	41.1
6-Nov-94	17:23:30	225307.4	1960.9	300.6	30.7	18.6	6.5	11.9	67.2	25	19.2
7-Nov-94											
8-Nov-94											
9-Nov-94	20:59:24	225778.5	4187.9	570.6	82	59.2	36.4	28.3	150.5	64.6	50.9
10-Nov-94											
11-Nov-94	20:04:30	225904.5	4644.1	761.7	46.9	13	-20.9	25.3	148.7	45.7	34.4
12-Nov-94	21:31:49	225978.7	5086.5	865.9	43	4.7	-33.6	25.1	157.8	24.1	34.6
13-Nov-94	17:14:20	225596.1	4626	773	36.8	1.5	-33.9	23.1	142.8	19.1	32.9
14-Nov-94	20:15:30	226379.3	4118.4	668.3	34.1	2.8	-28.6	21	128	23.4	29.1
15-Nov-94											
16-Nov-94	20:05:30	226365	2987.2	437.7	43.2	23.7	4.2	18.7	101.6	44.8	28.6
17-Nov-94	20:35:30	226560.6	2321.7	326.8	43.1	29.9	16.6	15.9	82.8	36.4	28.4

SAN FERNANDO OBSERVATORY
1995 Ca II K-line Facular Data
 WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
1-Jan-95											
2-Jan-95											
3-Jan-95											
4-Jan-95											
5-Jan-95	19:50:05	229024.8	2719.2	379.9	53.9	39	24	19.4	98.9	53.3	33.5
6-Jan-95											
7-Jan-95											
8-Jan-95											
9-Jan-95											
10-Jan-95											
11-Jan-95											
12-Jan-95											
13-Jan-95											
14-Jan-95											
15-Jan-95											
16-Jan-95	19:20:30	228749.4	1730	276.4	17.2	4.5	-8.2	9.3	55.4	19.7	11.6
17-Jan-95	19:33:30	228592.3	2141.3	353.4	8.1	-9.9	-27.8	9.1	62	-2.5	11.1
18-Jan-95	19:20:00	228694.4	2541.7	437.1	10.1	-11	-32	10.5	73.3	-10	14.4
19-Jan-95											
20-Jan-95	20:59:00	228630.2	6953.7	1104.4	123.3	82.2	41	47.4	246.6	125.1	78.4
21-Jan-95											
22-Jan-95											
23-Jan-95											
24-Jan-95											
25-Jan-95											
26-Jan-95											
27-Jan-95											
28-Jan-95	19:42:30	228276.3	3169.3	403.9	88.5	76.2	63.9	26.1	125.5	69.8	53.7
29-Jan-95											
30-Jan-95	20:51:30	228008	1092.4	133.2	27	22	17	8.7	42	24.4	16.8
31-Jan-95	22:10:10	227928.2	4696	657.6	122.5	103	83.4	35.6	181.3	91.5	70.7
1-Feb-95	22:01:30	228028.3	5699.4	952.1	98.4	64.3	30.2	38.1	200.8	98.3	62.4
2-Feb-95	20:28:30	227932.3	6579.6	1210.6	78.1	32.1	-13.9	37.8	216	79.2	53.7
3-Feb-95	21:31:30	227889.7	6784.6	1318.8	48.6	-4.4	-57.4	33.1	207.5	32.8	42.8
4-Feb-95											
5-Feb-95	17:20:50	227573.9	4223.2	773	17.5	-17.6	-52.8	18.2	122.9	-3.3	23
6-Feb-95	20:21:30	227728.9	6317.9	1188.9	52.3	4.2	-43.9	32.1	196.6	41.1	42.8
7-Feb-95											
8-Feb-95											
9-Feb-95	20:12:38	227388.1	1981.8	236.9	53.1	44.8	36.6	16.1	77.7	45.2	32
10-Feb-95	21:24:08	227377	2962.9	342.6	86.1	75.6	65.1	23.5	117.6	56	50.4
11-Feb-95											
12-Feb-95											
13-Feb-95											
14-Feb-95											
15-Feb-95	20:20:30	226767.1	4367.5	702.8	59.8	31.6	3.5	24.1	144.3	26.2	41.3
16-Feb-95											
17-Feb-95	21:06:47	226845.8	8229.2	1323.8	153.4	106	58.6	57.1	295.6	167	92.1

SAN FERNANDO OBSERVATORY

1995 Ca II K-line Facular Data

WAVELENGTH 3934nm

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18-Feb-95	19:25:28	226483.5	6624.4	1031.1	112.5	72.5	32.5	43.6	232.5	114.9	69.3
19-Feb-95											
20-Feb-95	19:50:30	226461	7436.3	1422.1	39	-21.4	-81.9	33.5	220.4	8.7	42.5
21-Feb-95											
22-Feb-95	23:07:15	226180.4	6992.5	1243	58.9	5.8	-47.4	35.7	218.4	54.7	45.3
23-Feb-95											
24-Feb-95	20:52:46	226147.2	6625.8	992.3	137.4	101.9	66.4	48.4	243.9	139.9	84
25-Feb-95											
26-Feb-95											
27-Feb-95											
28-Feb-95											
1-Mar-95											
2-Mar-95											
3-Mar-95											
4-Mar-95											
5-Mar-95											
6-Mar-95	19:24:39	224852	5313	786.7	95.3	64.1	32.9	36.1	188.8	97.5	59.1
7-Mar-95											
8-Mar-95											
9-Mar-95											
10-Mar-95											
11-Mar-95											
12-Mar-95	17:16:00	224107	1285.8	198.5	10.6	0.8	-9	6.5	40	9.6	8.2
13-Mar-95	19:43:00	224080.7	1897.2	300.6	10.1	-5.3	-20.7	8.6	56.3	1.4	11.4
14-Mar-95	21:36:20	223969.7	2227.6	332.1	18.8	2.1	-14.5	10.7	68.7	5.3	15.7
15-Mar-95											
16-Mar-95	18:53:29	223610.9	3838.9	527.2	91.3	73.3	55.2	29.3	145.6	78.9	56
17-Mar-95	20:51:55	223439.4	4195.3	683.9	75.3	50.5	25.6	29	149.8	86.5	45.9
18-Mar-95											
19-Mar-95											
20-Mar-95											
21-Mar-95											
22-Mar-95											
23-Mar-95											
24-Mar-95	20:27:01	222467.9	7522.7	1042.2	179.1	144.1	109.1	55.4	284	147.2	104
25-Mar-95	19:49:17	222487.5	7900.2	1141.5	189.9	153	116	60.7	300.7	168.2	114.9
26-Mar-95	17:15:30	222362.5	6386.3	895	131.7	97.9	64.1	44.3	233.1	122	76
27-Mar-95	20:18:00	222113.5	6050.5	1007.2	83	42.9	2.7	36.5	203.4	80.6	55.3
28-Mar-95	21:23:45	222025.2	5346.4	921.8	44.7	4.6	-35.6	26	165.1	16	37.5
29-Mar-95	20:29:00	221983.7	4505.5	793.6	21.4	-15.6	-52.5	19.9	132.2	-3.4	26.6
30-Mar-95	18:55:53	221788.2	3072	503.5	14	-11.3	-36.7	13.5	90	-0.3	17
31-Mar-95	20:38:29	221684.1	4985.2	840.5	40.1	1.8	-36.4	25.1	154.7	35.3	31.7

SAN FERNANDO OBSERVATORY
1995 Ca II K-line Facular Data

WAVELENGTH 3934nm

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19-May-95											
20-May-95	21:02:00	216118.2	1837.1	253.1	38	28.3	18.6	13	67.1	31.9	23.9
21-May-95											
22-May-95											
23-May-95											
24-May-95											
25-May-95											
26-May-95	18:57:30	215700	414.6	54.7	4.2	1.2	-1.7	2.2	13.2	2.8	3.4
27-May-95											
28-May-95	16:13:30	215651.6	422.4	56	7.9	5.5	3.1	3	15.2	8.6	5
29-May-95											
30-May-95	20:58:30	215298.3	870.2	147.6	4.8	-2.3	-9.3	4	25.9	1.8	4.9
31-May-95											
1-Jun-95											
2-Jun-95											
3-Jun-95											
4-Jun-95	15:46:10	215094.5	1619.4	234.1	32.8	24.2	15.6	11.1	58.7	26.8	19.8
5-Jun-95	18:52:00	215018.5	3529.4	537.2	72.8	53.8	34.7	25.7	129.8	76.6	43.7
6-Jun-95	19:07:30	214877	4183.4	624.9	76.1	51.7	27.2	28.9	149.4	80.9	47.1
7-Jun-95											
8-Jun-95	18:49:00	214843.6	4957.2	841.6	33.6	-5.3	-44.2	23.8	150.4	13.6	32.6
9-Jun-95	18:52:30	214755.2	6019.6	1114.2	29.5	-19.8	-69.1	26.8	177.4	2.5	34.4
10-Jun-95	19:48:00	214753.4	6272.4	1169.1	48.1	-0.3	-48.7	31	193.5	39.2	38.9
11-Jun-95	15:51:30	214799.2	6769.1	1222.4	78.1	30.3	-17.5	38.6	221.5	85.7	52.4
12-Jun-95	18:47:30	214669.6	5485.8	882.4	103	71.7	40.4	38.2	197	102.9	64.7
13-Jun-95	19:05:00	214576.8	4637.6	596.7	118.6	98.9	79.3	34.5	177.7	84.3	68.9
14-Jun-95											
15-Jun-95											
16-Jun-95											
17-Jun-95											
18-Jun-95	16:05:30	214448.5	513	70.9	3.5	-0.5	-4.6	2.4	15.5	1.2	3.2
19-Jun-95	18:45:30	214271.9	2224.4	256.2	58.8	50	41.2	16.1	85.2	31.5	34.3
20-Jun-95	18:47:30	214227.9	3178.2	500	73.1	57.4	41.8	24.5	120.1	70.5	45.3
21-Jun-95	20:01:00	214350.5	3488	676.9	52.3	29.8	7.2	22.3	120	64.4	31.7
22-Jun-95	19:20:59	214294.7	3000.5	627.5	23.1	-0.1	-23.3	14.8	92.7	21.6	17.9
23-Jun-95	19:24:30	214243.3	3140.8	749.2	6.9	-20.3	-47.4	12.4	88.4	-15.4	15.8
24-Jun-95	19:27:30	214151.7	2496.8	539.8	7.1	-14.1	-35.2	10	70.6	-17.1	14.7
25-Jun-95	16:43:40	214418.4	2675.6	566.3	13	-8.9	-30.9	11.9	78.7	-0.5	15.5
26-Jun-95											
27-Jun-95	19:44:00	214014	2459.8	431.9	44.9	30.5	16.1	17.2	88.1	50.6	27.6
28-Jun-95	19:18:45	214154.1	2276.3	321.8	54.4	43.8	33.2	17.4	86.2	42.1	34.5
29-Jun-95	19:34:45	213984.7	1670.2	226	30.7	21.5	12.3	10	58.3	14.6	18.7
30-Jun-95	19:39:30	214225.7	1834.3	272.4	28	16.6	5.2	10.9	62.2	16.2	19.2

SAN FERNANDO OBSERVATORY

1995 Ca II K-line Facular Data

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1-Jul-95	20:17:15	214071.4	3137.5	413.3	68	52.4	36.8	21.3	114.7	44.9	40.5
2-Jul-95	16:20:16	214203.4	4305.2	622.8	87.1	63.9	40.7	30.4	156.7	78.1	53.9
3-Jul-95											
4-Jul-95											
5-Jul-95	19:14:00	214121.3	4432.3	847.3	21.5	-14.9	-51.2	19.6	130.5	3.2	24.4
6-Jul-95	19:26:30	214079.5	5390.3	959	52.2	13.3	-25.6	26.8	168.8	11.6	42.4
7-Jul-95	19:30:00	214145.1	6113.9	1068.3	83.3	42.9	2.5	36.7	204.5	65.8	59.7
8-Jul-95	20:04:34	214136.3	6054.3	1086.2	83.9	43.7	3.4	37.1	204.5	91.7	54.3
9-Jul-95	16:28:30	214187.5	5169.1	964.8	70.7	36.2	1.6	31.2	174.2	80.5	43.8
10-Jul-95	18:42:30	214221.1	4515.6	858.5	58.9	28.4	-2.1	26.9	150.3	53.6	41.4
11-Jul-95	19:26:23	214153.9	3758.2	686	49.3	24.4	-0.4	21.2	123.8	24.5	36.1
12-Jul-95	19:38:30	214138.9	2515.4	502.6	22.6	3.9	-14.9	12.7	78.9	17.5	16.7
13-Jul-95	19:13:30	214131	2519.8	484.1	30	12.3	-5.4	14.5	83.1	37.4	18.6
14-Jul-95	19:27:30	214130.8	2815.5	486.5	41.8	23.7	5.5	17.9	96.3	43.3	27.7
15-Jul-95	19:35:40	214151.3	2706.1	416.9	40.1	23	5.9	16.5	91.4	22.7	29.8
16-Jul-95											
17-Jul-95											
18-Jul-95	19:32:05	214216.7	2424.9	401.3	31.5	14.9	-1.6	14.5	81.1	38	19.7
19-Jul-95	19:23:10	214307.7	2382.4	380.6	32.7	16.9	1.1	14.5	80.1	31.8	22.2
20-Jul-95	19:36:10	214374	2518	409.8	24.7	6.5	-11.7	13	79.2	6.4	21.3
21-Jul-95	19:13:15	214493.1	2049.1	350.1	11.2	-5.2	-21.7	9	60.5	-4	12.9
22-Jul-95	19:25:30	214388.1	1776.2	289.4	13.2	-0.7	-14.5	8.7	54.6	11.2	10.7
23-Jul-95	16:01:00	214526.5	1394.9	214.3	17.2	7.6	-2.1	8.2	46.2	20.4	11
24-Jul-95	19:25:30	214628.4	1099.6	154.5	17.5	10.7	3.8	7.2	38.1	17.2	11.7
25-Jul-95	19:34:45	214448.8	572.4	79.1	7.7	3.9	0.1	3.4	19	5.1	5.6
26-Jul-95	19:46:30	214598.3	655.5	104.5	4.1	-1.1	-6.3	3.1	19.8	2.5	3.9
27-Jul-95	20:04:00	214504.5	712.7	111.8	4.2	-1.5	-7.2	3.3	21.4	2.3	4.1
28-Jul-95	19:47:00	214563.2	529.6	72.5	6.4	2.7	-0.9	3	17.4	5.5	4.5
29-Jul-95	19:15:45	214760	1286.7	164.6	24.9	17.7	10.5	9	46.4	23.1	15.6
30-Jul-95											
31-Jul-95	19:58:00	214866.8	1939.1	324.9	20.3	6.3	-7.8	10.7	62.6	22.9	13.7
1-Aug-95	19:47:00	214833	2472.3	452.2	13.1	-7	-27.2	11.1	73.4	5	13.6
2-Aug-95	19:32:30	214875.4	2439.5	451.2	11.2	-8.8	-28.8	10.6	71.2	-5.9	14.9
3-Aug-95	19:44:45	214890.5	3260.1	604.1	25.6	0.8	-24.1	16.1	100.2	8	23.9
4-Aug-95	19:31:05	214971.9	3755.7	632.8	47.3	21.7	-4	21.7	124.1	43.2	32.3
5-Aug-95	19:53:30	214970.8	4730.2	788.9	63.7	31.8	0	28.8	159.1	72.5	41
6-Aug-95	15:55:45	215315.8	4332.9	691.9	64.9	37	9.1	27.5	148.5	68.5	42.3
7-Aug-95	22:41:59	215086.2	4055.6	674.3	56.2	29.8	3.3	23.6	135.6	41.7	37.5
8-Aug-95	19:51:25	215229.3	3052.6	523.1	37.3	16.2	-4.8	17.5	100.4	34.2	25.5
9-Aug-95	19:41:30	215328.7	1955.9	300.2	30.8	18.7	6.5	12.4	67.3	25.7	20.9
10-Aug-95	19:26:00	215388.8	1439.6	210.3	21.6	12.5	3.4	8.6	48.8	17.1	13.7
11-Aug-95	19:47:45	215484.2	1881.2	249.3	36.7	26.6	16.5	12.2	67.1	23.5	22.6
12-Aug-95	19:44:15	215573.1	1823.7	260.1	39.9	30.6	21.2	13.7	67.8	35.6	25.6
13-Aug-95	15:55:30	215747.6	1852.7	293.2	35	24.3	13.6	13.1	66.9	40.3	21
14-Aug-95	19:51:00	215734.9	1643.2	306.5	16.2	4.1	-8	8.8	52.5	18.2	11
15-Aug-95	19:47:00	215829.7	2043.2	421.2	10.8	-5.8	-22.4	9.2	60.6	3.2	11.6
16-Aug-95	19:34:36	215720.1	1755.7	326.8	8.4	-6.1	-20.5	7.8	51.6	0.1	10.1
17-Aug-95	19:53:15	215986.1	2086.5	379.9	14.6	-1.7	-18.1	10.1	63.6	7.9	13.5

SAN FERNANDO OBSERVATORY

1995 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
1-Oct-95	16:07:55	220636.6	881.3	112.3	17.7	12.9	8.1	6.4	32.2	18.1	11
2-Oct-95	19:55:00	221094.3	639.4	93.8	7.3	2.7	-1.8	3.6	20.9	8	4.8
3-Oct-95	20:26:25	221163.7	704.7	112.5	4.2	-1.4	-7	3.3	21.1	1.3	4.4
4-Oct-95	20:39:30	221076.1	630.1	97.8	2.7	-2.6	-7.8	2.7	18.4	-1	3.7
5-Oct-95	18:33:00	221282.1	617.3	103.8	2.5	-2.6	-7.7	2.7	18	-0.3	3.3
6-Oct-95	22:57:12	221616.2	751.1	101	8.9	3.7	-1.6	4.3	24.7	9.1	6.1
7-Oct-95	20:15:30	221557.5	459.4	62.8	5	1.7	-1.6	2.6	14.9	5.6	3.4
8-Oct-95	16:18:55	221755.6	711.5	87.1	14.9	11.5	8	4.2	25.4	5.7	8.2
9-Oct-95	19:50:11	221955.4	1721.1	253.7	37.9	29.3	20.6	12.7	63.8	29	24.8
10-Oct-95	19:48:00	222095.9	2536.7	468.3	35.7	18.9	2.2	15.7	85.9	38	23.6
11-Oct-95	20:52:30	222215.5	3892.4	665.8	65.2	41.6	18.1	25	135.9	63	39.9
12-Oct-95	20:22:15	222195.3	4473.7	803.3	64.5	35.3	6.1	27.9	152	64.7	43.1
13-Oct-95	20:14:30	222299.9	4799	886.4	54.5	20.7	-13.1	26.8	155.8	45.7	39.3
14-Oct-95	20:20:45	222555.4	5229.5	1009.3	39	-1.5	-42.1	25.3	160.7	31.1	30.9
15-Oct-95	16:10:30	222554.7	4089.5	752.6	32.4	0.9	-30.6	20.4	126.8	30.6	25
16-Oct-95	19:44:05	222679	5219	889.5	72.6	38.3	3.9	31.6	175.7	67.8	48.9
17-Oct-95	19:51:30	222696.4	3568.5	604.2	57.8	35.7	13.7	23	123.9	56.5	36.7
18-Oct-95	20:17:33	222942.7	2837.1	467.5	55.2	39.4	23.6	19.6	102.6	56.1	32.3
19-Oct-95	20:12:00	223248.3	2054.9	318.3	40.6	29.2	17.8	14.8	74.9	42.5	25.3
20-Oct-95	20:25:10	223257.7	2334	313.9	50.2	38.6	27	15.6	85	31.2	29.9
21-Oct-95	22:36:26	223413.5	2341.3	322	44.2	31.4	18.5	15.2	82.9	25.2	29.3
22-Oct-95	16:17:30	223442.3	2515.5	346.8	55	42.1	29.3	18.8	93.5	49.1	34.9
23-Oct-95	19:30:00	223529.2	3871.8	652.5	49.8	23.4	-3.1	23.1	129.1	56.3	32.5
24-Oct-95	20:13:30	223691.7	3571.5	688.5	28.9	1.6	-25.8	18	111	27.6	22.1
25-Oct-95	19:02:20	223793	3558.1	701.6	19	-9.9	-38.7	16	105.5	3	20.7
26-Oct-95	20:16:01	224029	3336.4	680.8	11.5	-16.6	-44.7	14	95.9	-9.5	18.3
27-Oct-95	20:06:00	224242.6	3349.7	672.9	19.5	-7.4	-34.3	15.5	100.4	10	19.1
28-Oct-95											
29-Oct-95											
30-Oct-95	21:16:00	224609	2037.9	271.9	52.6	43.8	35	16.1	78.9	42	32.2
31-Oct-95											
1-Nov-95											
2-Nov-95											
3-Nov-95											
4-Nov-95	20:49:45	225153.8	1163.5	217.8	5.5	-4.1	-13.6	5.1	34.1	-1.7	7.1
5-Nov-95	16:40:30	225137.7	807.2	129.8	8.1	2.2	-3.6	4.3	25.7	5.7	6.3
6-Nov-95											
7-Nov-95	21:13:45	225517.5	2342.8	325.6	46.2	33.3	20.5	16.2	84.6	40.1	28.7
8-Nov-95	22:01:15	225690.2	2125.4	323.3	26.6	12	-2.6	12.5	70.3	25.8	18.5
9-Nov-95	21:35:00	225767.9	1754.6	289.3	16	2.9	-10.3	9.2	55.4	16.1	11.8
10-Nov-95	20:28:30	225747.5	1859.4	317.8	12	-2.8	-17.6	8.8	56.3	9.1	10.4
11-Nov-95	21:13:30	225979	2847.8	451.6	28.4	7.7	-13	15.1	90.5	19.1	22.2
12-Nov-95	17:06:40	225829.6	2043.5	310.2	25.8	11.9	-2.1	12.1	67.8	25.3	18
13-Nov-95	20:31:30	226154.7	2059	338.7	24.2	9.7	-4.7	11.8	67.5	26.2	16
14-Nov-95	20:57:20	226076.1	1587.6	267.3	18.4	7.2	-4	9	51.9	19.4	12.4
15-Nov-95	21:18:10	226264.5	1463.4	231.4	20.2	10.5	0.8	9	49.2	17.7	14.4
16-Nov-95											
17-Nov-95	20:59:15	226457.5	1765.3	254.7	32.2	22.2	12.3	11.3	62.2	22	20.1

SAN FERNANDO OBSERVATORY

1996 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
19-May-96	16:19:00	216273.4	186	24.6	2.3	1	-0.3	1.1	6.2	2.8	1.4
20-May-96	20:16:30	216043.5	91.5	13	0.6	-0.1	-0.8	0.4	2.8	0.3	0.6
21-May-96	20:04:12	215880.9	269.7	38.2	1.9	-0.2	-2.3	1.3	8.2	1.1	1.8
22-May-96											
23-May-96	20:00:48	215794.8	52.5	6.6	0.5	0.1	-0.3	0.3	1.7	0.5	0.4
24-May-96											
25-May-96											
26-May-96	16:40:30	215678	33.3	3.7	0.7	0.6	0.4	0.3	1.2	0.8	0.4
27-May-96											
28-May-96	19:50:45	215367	52.4	6.8	0.5	0.1	-0.3	0.3	1.7	0.5	0.4
29-May-96											
30-May-96											
31-May-96	20:02:45	215112.6	495.9	69.1	5.2	1.7	-1.9	2.7	15.9	3	4.3
1-Jun-96	19:47:30	215077.8	499	71.9	4.7	1.1	-2.6	2.7	15.8	3.4	3.9
2-Jun-96											
3-Jun-96	20:30:15	215006.7	1033.9	138	19.8	14	8.3	7.1	37.1	16.8	12.5
4-Jun-96	20:12:30	215029.8	1480.9	227	23.9	14.7	5.4	9.7	51.7	27.7	14.6
5-Jun-96											
6-Jun-96	21:12:00	215024.6	2638.5	464.2	24	4.4	-15.3	13.9	83	16.6	20
7-Jun-96	19:08:00	214813.1	2671.9	480.4	13.6	-8.2	-30	11.9	78.9	1.7	15.3
8-Jun-96	19:48:35	214894.8	2509.2	469.3	10.8	-10	-30.8	10.9	73.3	-0.2	13.4
9-Jun-96	18:22:19	214722.1	2690.9	475.5	22	1.5	-19.1	13.7	83.6	16.9	18.4
10-Jun-96	19:30:29	214757	2437.3	394.8	32.7	16.5	0.2	14.7	81.5	29.3	22.9
11-Jun-96	18:46:00	214482.3	1765.7	249.2	34.1	24.4	14.6	11.9	63.4	30	20.5
12-Jun-96	20:22:30	214693.1	744.1	97.7	15.6	11.6	7.7	5.4	27.4	15.3	9.4
13-Jun-96	19:53:10	214603.9	233.5	27.9	5.2	4	2.9	1.8	8.7	4.8	3.3
14-Jun-96	19:27:00	214576.8	120.6	15.5	1.6	0.8	0	0.7	4	1	1.1
15-Jun-96	19:33:30	214381.3	38	4.6	0.4	0.2	-0.1	0.2	1.2	0.5	0.3
16-Jun-96											
17-Jun-96	20:18:30	214382.8	82.7	11.4	0.3	-0.4	-1.1	0.3	2.4	-0.1	0.4
18-Jun-96	19:45:30	214289.9	263.5	39.2	3.1	1.3	-0.6	1.5	8.7	3.5	2.1
19-Jun-96	20:00:45	214341	576.7	85.5	5.2	0.9	-3.5	3	18.2	5.2	3.8
20-Jun-96	19:03:15	214438.1	743.1	90.5	17.7	14.3	10.9	5.3	27.9	12	10.4
21-Jun-96											
22-Jun-96	20:40:30	214276.4	1117.8	160.9	20.6	14.1	7.6	7.8	40.1	23	12.4
23-Jun-96	16:27:36	214349.6	1061.3	162.1	13.9	6.7	-0.5	6.3	35.5	15.3	8.9
24-Jun-96	21:44:15	214256.8	1961.6	284.9	32	20.1	8.2	12.4	67.6	21.1	22.3
25-Jun-96											
26-Jun-96	22:46:39	214130	1784.5	297.8	15.8	2.4	-11.1	9.3	56.1	15.7	11.8
27-Jun-96	19:27:30	214282.1	1423.5	238.1	9.5	-1.8	-13	6.8	43.3	7.2	8.2
28-Jun-96	19:54:10	214245.5	1726.8	257.8	23.5	12.1	0.8	10	57.5	15.8	16.4
29-Jun-96	19:59:30	214077.2	1843.1	279.6	26.7	14.9	3.1	11.3	62.2	18.6	19.4
30-Jun-96	15:51:49	214322.2	2214.3	341.4	32.1	17.7	3.4	13.7	75.3	32.2	21.1

SAN FERNANDO OBSERVATORY
1996 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemirearea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
1-Jul-96	23:38:30	214181.7	1775.8	269.1	25.9	14.3	2.7	11.2	60.8	32.1	15.7
2-Jul-96	19:19:30	214222.1	2945.9	435	44.8	26.3	7.9	17.7	100.2	35.7	28.4
3-Jul-96											
4-Jul-96	19:43:30	214093.4	2722.9	440.6	27.1	7.2	-12.8	14.7	86.9	24.2	20.5
5-Jul-96	17:52:00	214264.3	2707.6	430.9	23.9	3.5	-16.9	14	85.2	24.2	17.6
6-Jul-96	20:12:45	214048.2	2811	461.5	24.9	3.8	-17.3	14.6	88.3	21.6	19.5
7-Jul-96	16:37:50	214306.7	2655.1	428.1	26.4	7.1	-12.3	14.2	84.4	18	21.3
8-Jul-96	18:47:00	214081.5	2324.1	408	20.6	3.2	-14.3	12	73.1	19.9	15.2
9-Jul-96	19:26:41	214132.6	2171.1	355.6	31.3	17	2.7	13.6	74.1	38.5	18.9
10-Jul-96											
11-Jul-96	20:36:09	214185.7	1986	246	58	50.9	43.9	16	79.1	39.8	34
12-Jul-96	19:10:40	214018.2	817.6	86.2	21	17.7	14.5	5.2	30.7	9.5	10.7
13-Jul-96	21:10:15	214187.2	263.7	41.5	1.4	-0.8	-2.9	1.2	7.8	0.4	1.4
14-Jul-96	16:19:41	214258	117.4	15.9	0.4	-0.5	-1.5	0.5	3.4	-0.3	0.7
15-Jul-96	19:21:30	214236.6	247	33.5	4.1	2.6	1.1	1.6	8.6	4.2	2.7
16-Jul-96	19:51:05	214150.3	168.4	23.7	1.6	0.3	-1	0.9	5.3	1.6	1.1
17-Jul-96											
18-Jul-96	20:52:00	214278.4	178	22.2	2.8	1.7	0.6	1.2	6.2	2.8	1.9
19-Jul-96	20:11:30	214286.1	255	33.5	3	1.2	-0.6	1.4	8.3	2.5	2.2
20-Jul-96	20:57:15	214131.6	179.6	24.6	1.6	0.3	-1.1	0.9	5.6	1.3	1.2
21-Jul-96											
22-Jul-96	19:26:00	214402.8	149.1	20.4	1.1	-0.1	-1.2	0.7	4.6	0.4	1
23-Jul-96	19:40:00	214522.2	160	21.8	1.6	0.5	-0.7	0.9	5.1	1.7	1.2
24-Jul-96	20:21:00	214429	295.8	44.4	1.7	-0.6	-3	1.4	8.9	0.9	1.7
25-Jul-96	21:24:45	214538.5	434.7	65.3	1.7	-2	-5.6	1.9	12.6	-0.7	2.4
26-Jul-96											
27-Jul-96	20:27:45	214667.9	417.8	61.7	4.9	1.9	-1	2.4	13.7	4.4	3.5
28-Jul-96											
29-Jul-96	19:43:00	214822.2	2788.6	388.1	73.2	61.5	49.8	22	108.3	57	44.2
30-Jul-96	19:34:19	214778.2	3477.2	569.2	66.2	46.4	26.6	24.7	125.6	70.1	41.5
31-Jul-96	19:52:00	214817.2	4242.5	778.9	50.3	20.5	-9.2	24.5	139.6	58.9	32.6
1-Aug-96	19:23:30	214965.7	5218.4	1086	35	-6.2	-47.5	24.9	158.7	27.6	29.7
2-Aug-96	19:41:33	215074.7	4985.6	1084.8	22.5	-18.7	-59.9	21.8	146.1	3	26.2
3-Aug-96	20:48:50	214792.8	4614.5	1005.9	27.8	-9.2	-46.2	21.4	138.8	18.1	25.4
4-Aug-96											
5-Aug-96	19:48:45	215053.9	3903.2	673.3	74.6	52.2	29.8	28	141.7	89.6	44.3
6-Aug-96	19:57:31	215208.1	3516.9	497.1	93.2	78.3	63.4	29	138	85.3	56.8
7-Aug-96	20:05:00	215240.3	1871.5	221.3	53.7	47	40.4	14.2	73.6	31.4	30.5
8-Aug-96	19:37:50	216080.7	470	93.9	1	-3	-7.1	1.9	13.2	-2.3	2.4
9-Aug-96	19:09:45	215463.2	1074.2	216.3	4.3	-4.6	-13.5	4.6	31.1	-3.5	6.5
10-Aug-96	20:20:51	215457.5	1132.7	217.9	6.5	-2.6	-11.7	5.2	33.9	2.8	6.5
11-Aug-96											
12-Aug-96	19:06:30	215680.7	1531.8	258.7	26.9	17.7	8.6	10.6	54.5	31.4	16.5
13-Aug-96	18:44:50	215736.6	1644.7	230.4	41.7	34.5	27.2	13.1	63.5	34.5	26.1
14-Aug-96	19:32:10	215880.2	900.7	101.5	21.9	18	14	6.2	33.8	13.5	12.1
15-Aug-96											
16-Aug-96											
17-Aug-96	19:05:40	215917.4	619.7	105	4.6	-0.2	-5	3	19.1	4.4	3.6

SAN FERNANDO OBSERVATORY
1996 Ca II K-line Facular Data

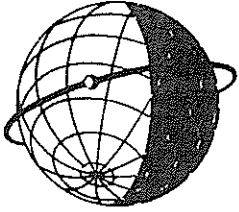
WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
18-Aug-96											
19-Aug-96	20:47:29	216149.4	587.9	87.3	8.5	4.7	0.9	3.7	20	9.2	5.6
20-Aug-96	19:06:19	216254.9	903.7	130	13.9	8.1	2.4	5.7	31	12.6	9.3
21-Aug-96	20:02:40	216250.6	446.3	60	8.8	6.3	3.9	3.1	16.1	8.2	5.2
22-Aug-96	18:54:45	216425.8	591.2	76.6	12.1	9	5.9	4.1	21.5	8.9	7.8
23-Aug-96	20:23:30	216546.1	450.9	51.3	11	8.9	6.9	3.4	17.1	8.3	6.8
24-Aug-96	18:47:30	216693	987.5	103.8	28.5	25	21.5	7.4	38.9	17.8	15.6
25-Aug-96											
26-Aug-96											
27-Aug-96	20:45:30	216761.3	5651.8	1034.8	82	45	8	35.5	193.1	99.6	50.3
28-Aug-96	18:52:53	216941.6	5609	1117.4	52.2	10.4	-31.5	29.5	177.8	57	36.5
29-Aug-96											
30-Aug-96	19:27:40	217305.2	5293.1	1161.6	29.7	-13.1	-55.9	24.1	158.1	16.6	28.6
31-Aug-96	20:16:50	217256.6	5071	1034.3	53.3	16.5	-20.3	27.8	163.6	60	35.6
1-Sep-96	16:29:34	217512	4604.4	855.9	75	46.3	17.6	30.5	161.2	91.9	44.8
2-Sep-96	19:49:10	217539.4	4012	616.6	96.1	77.1	58	31.5	153.3	94.2	58.3
3-Sep-96											
4-Sep-96	19:35:00	217798	1003.3	119	20.1	15.1	10	5.7	35.3	5.3	11.5
5-Sep-96	21:02:06	217753	356.7	54.8	1	-2	-5	1.5	10.2	-1.2	1.9
6-Sep-96	18:37:45	217905.9	463.8	68	4.1	0.6	-2.9	2.4	14.6	3.8	3.2
7-Sep-96	21:10:30	217914	559.7	84.3	6	2	-2.1	3.1	18.1	7.1	3.9
8-Sep-96	16:13:42	218117.6	473.6	70.5	6.3	3.1	-0.1	2.9	15.9	7.6	3.9
9-Sep-96											
10-Sep-96	20:47:34	218206.5	111.9	15	0.9	0	-0.8	0.6	3.5	0.6	0.7
11-Sep-96	20:42:30	218359.1	186.8	26.1	1.8	0.4	-1	1	5.9	1.8	1.3
12-Sep-96	17:51:39	218647.6	184.1	24.6	1.6	0.2	-1.2	0.9	5.8	1.6	1.2
13-Sep-96											
14-Sep-96	20:49:56	218872.8	119.7	16.7	0.5	-0.5	-1.5	0.5	3.5	-0.1	0.6
15-Sep-96											
16-Sep-96											
17-Sep-96											
18-Sep-96	20:47:30	219281.3	43.8	5.4	0.6	0.3	0	0.3	1.5	0.5	0.4
19-Sep-96	17:58:14	219496.5	70.1	10	0.5	0	-0.6	0.3	2.1	0.3	0.5
20-Sep-96	20:11:11	219405.1	511	60.2	10.9	8.3	5.7	3.5	18.7	7.3	6.9
21-Sep-96	20:30:30	219624.7	1519.2	186.9	35.5	28.3	21.1	11.2	57	27.1	21.6
22-Sep-96											
23-Sep-96	20:15:15	219888.1	2497.9	398.9	36.1	19.8	3.4	15.7	85.3	43.5	22.2
24-Sep-96	20:58:12	219879.2	2734.2	465.3	22.8	2	-18.8	13.9	85.4	23	16.9
25-Sep-96	20:18:50	220128.4	2501.6	434.9	13.8	-6.4	-26.7	11.4	74.6	7.1	13.6
26-Sep-96											
27-Sep-96	20:08:34	220378.4	2313	388.4	23.6	6.7	-10.2	12.6	74.3	26.3	16.1
28-Sep-96	20:36:50	220543	2282.1	355.9	37.7	23.6	9.6	15.2	80	43.8	23
29-Sep-96	16:29:30	220619.5	2042.3	275.1	45.3	34.9	24.5	15.5	76.5	46.6	27.4
30-Sep-96	20:56:30	220737	529.6	57.9	13.9	11.7	9.5	4.1	20.5	10.1	8.4

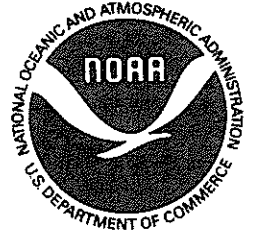
SAN FERNANDO OBSERVATORY
1996 Ca II K-line Facular Data

WAVELENGTH 3934nm

Date	U.T.	Hemiarea (pixels)	Fac Area (ppm)	PFIFX (ppm)	PFIFA (ppm)	PFIFB (ppm)	PFIFC (ppm)	PFIF2 (ppm)	PFIF (ppm)	PFIFOUKAL (ppm)	PFISOFIA (ppm)
18-Nov-96	21:38:30	226703.5	2727	432.4	22.1	1.3	-19.6	13.7	84.8	19.8	17.3
19-Nov-96	19:41:51	226787.1	2153.8	353.1	15.3	-1.5	-18.4	10.5	65.8	10.5	13.5
20-Nov-96											
21-Nov-96											
22-Nov-96											
23-Nov-96	21:00:43	227076.2	2082.1	344.8	35.7	23.1	10.4	14.2	73.8	44.4	21.1
24-Nov-96											
25-Nov-96											
26-Nov-96	19:15:12	227293.8	2258.1	389.6	17.8	0.8	-16.2	10.6	68.8	-3.7	17.5
27-Nov-96	19:57:45	227322.5	1795.7	320.5	9.9	-4.6	-19.2	8.2	53.6	5.6	9.6
28-Nov-96											
29-Nov-96	20:30:05	227532	2403.5	377.6	53.8	41.5	29.2	18.6	90.6	59.3	32.5
30-Nov-96	17:52:10	227479.4	1996.4	254.2	58	50.6	43.2	17	80.2	47.4	35.2
1-Dec-96	17:14:57	227479.1	1210.7	124.2	37.3	33.6	29.9	9	48.3	19.4	19.7
2-Dec-96	22:31:30	227488.5	170.7	22.9	1.7	0.5	-0.8	0.9	5.5	1.8	1.2
3-Dec-96	19:34:32	227845.7	143.8	20.6	0.7	-0.5	-1.7	0.6	4.2	0.1	0.8
4-Dec-96	21:27:55	227949.3	168.1	26.1	0.9	-0.5	-1.9	0.8	5	0.3	0.9
5-Dec-96											
6-Dec-96											
7-Dec-96	21:55:00	228085.8	143.1	18.6	1.9	1	0	0.9	4.8	2.2	1.3
8-Dec-96	17:02:41	227898.3	99.9	13.4	1.3	0.7	0	0.6	3.4	1.7	0.8
9-Dec-96											
10-Dec-96											
11-Dec-96											
12-Dec-96											
13-Dec-96	19:32:30	228462.2	2730.5	333.3	74	63.1	52.1	21.6	106.8	56	44.1
14-Dec-96	22:01:50	228169.4	1514.7	193.5	37.2	30.2	23.3	11.8	58.1	34.4	22.3
15-Dec-96	17:49:30	228228	1539	229.1	24.7	15.1	5.5	10.1	53.6	27.8	15.4
16-Dec-96											
17-Dec-96											
18-Dec-96	21:00:01	228733.6	4765.5	775.9	56.5	23.8	-8.9	26.2	154.6	28.6	43
19-Dec-96											
20-Dec-96	20:42:46	228803.1	5170.4	862.1	76.5	42.9	9.3	32.7	177.3	92.3	46.7
21-Dec-96											
22-Dec-96											
23-Dec-96	19:35:41	228714.8	2462.5	429.2	18.6	-0.1	-18.8	11.5	74.7	-4.4	18.6
24-Dec-96											
25-Dec-96	18:14:30	228561.7	1508.6	235.9	18.5	8	-2.5	8.8	50	23.4	11.3
26-Dec-96											
27-Dec-96											
28-Dec-96											
29-Dec-96											
30-Dec-96											
31-Dec-96											



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The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."